

THE SOUTHERN CABINET.

VOL. 1.

NOVEMBER, 1840.

No. 11.

For the Southern Cabinet.

A HURRIED VISIT TO NEWBERRY DISTRICT.

BUSINESS, not pleasure, required me on a recent occasion, to make an excursion into the interior of our State as far as Newberry; and as even the small items of information which the traveller picks up in his way, may add a little to the general mass of intelligence, I have ventured to throw together, the observations I was enabled cursorally to make during my absence from our bustling city, especially those in an agricultural point of view. I must here premise that I am no agriculturalist, and if my kind country friends detect me in a dozen blunders, I will plead guilty to the charge without much demurring, with a single proviso that they will continue to persevere in all that is excellent and praiseworthy, and strive to correct whatever is wanting in their system of agriculture.

Little is seen along the line of the rail-road through Branchville to Orangeburgh to interest the agriculturalist. The puffing engine seems struggling to hurry us over a dreary region of sand, pine-woods, and dismal swamps. This, indeed, is done so effectually, owing to the improved state of our rail-road, that ere the traveller has digested his morning-meal, he is at Branchville.—Then commences a road the smoothest and easiest I have ever travelled on; none in our country can compare with it, and even the far-famed one between Liverpool and London is, in this particular, inferior to it: for whilst that allows the politician to read the news-paper with ease and comfort, this would permit him without much inconvenience to indite the articles and carry on his correspondence. But this dream of repose and comfort is not destined to last long. A line of stages conveys you, in a snail's pace, to our far-famed Seat of Government. John Bull, who rattles in the coach from Edinburgh to London at the rate of eleven miles an hour, and grumbles about slow driving, may here read the book of Job, and study patience. These forty miles are accomplished with some exertion in fifteen or sixteen hours, at the rate of two miles and a half an hour, and at an expense, to the impatient traveller, of twelve cents and a half per mile. I have heard that the proprietor of that line of stages, is a very humane gentleman, and I can give him the credit of gentle driving, suited to an invalid, which has not its equal in this fast-driving, go-ahead country. It is true, in a cold night, when the traveller is left shivering in the stage for an hour or two, whilst the driver is warming his toes under a pretence of changing horses, it is not quite so pleasant; but it serves as a variety; and what cannot be mended, till the rail-road is completed, may as well be borne with as much philosophy as we poor grumblers are able to muster.

A star-light night, however bright, is unsuited to an agricultural survey, and we passed over Huggaboo swamp, so full of peril and disaster in other years—over the rich lands of Taylor, and his neighbours, far-famed for their productiveness since the days of indigo planting, without being able to venture on more than a mere conjecture, that they had this year been planted in cotton: and onward through Old Granby, once threatening, with its commercial enterprise and wealth, to strangle its infant neighbour on the opposite shore, but now retired from the strife of emulation, and like Cincinnatus of old, consoling herself with the labours of the plough. Arriving at Columbia, the shades of mid-night had long invited its inhabitants to repose;—but they were not all asleep: a bustling, anxious crowd, surrounded the stage. The electioneering campaign had not yet ended, and the result of the contest in Pennsylvania, and New-York was expected with intense interest. I could not at first account for the thrilling excitement. Accustomed to believe, that whilst the people were enlightened and virtuous the constitution and the republic would be safe, whoever might be chosen as its Chief, I had left the matter to the politician, and had not inquired into the result of the election. Other passengers, however, had been less indifferent, and they brought intelligence of defeat to the one party and of triumph to the other. Great was the exultation on the one hand, and of mortification on the other. But it was not all pure patriotism that exulted in the shout or awakened the sigh of regret. “I have won my suit of clothes,” exclaimed one. “I am five hundred dollars poorer,” whispered another. “I was never surer of my bet, and was never more disappointed,” says a third. Now, good friends, can you solve this problem in morals! Where is the difference between betting at the gambling-table, the horse-race, or on the presidential contest! You did not sympathise much with the gamblers of Vicksburgh, who were hung up without many forms of trial; and on which horn of the dilemma have you been hanging your character and your peace?

Arriving at the fertile District of Newberry, I was more than gratified at the improvements, in many respects, which ten or a dozen years had produced. To use a hacknied phrase, but in a more literal point of view, “the school-master had been at work.” This was strikingly apparent in the greater intelligence of the people, in their refinement and gentility, and the comforts of life by which they were surrounded. I was glad to find that this improved condition in their circumstances had not degenerated into extravagance or dissipation, but that a due economy and a commendable simplicity of character had been preserved. Their fathers were *famed* for hospitality; I had personal and gratifying evidence that their sons had not lost the recipe.

There was one change in the habits or fashion of the people, which I marked with peculiar interest, and to which I must give my hearty approbation. On a former occasion it was regarded as an essential part of hospitality to place before the guests wine and spirituous liquors, and he who could muster nothing better, paraded the whiskey-bottle. There seemed at that time to be some remnant of Indian customs, who smoke the calmut as a token of peace. Here the hospitable farmer seemed to say, let us drink and be friends, forgetting at the same time that in this excess of hospitality, they might tip the glass once too often, quarrel, and become enemies. On the present occasion, during a week’s general intercourse

with the people, I saw not even in houses kept for the entertainment of the traveller, any liquor stronger than persimmon-beer. The result was sufficiently apparent. What had been saved from the grocery-store was appropriated to the comforts of the house, and the education of the children. The master's example had extended to the servants. The latter were far stronger and healthier than in Districts where the dram-shop is open to tempt the slave to be a thief and a rogue—disobedient to his master and unfaithful to his God. I was hailed by a colored-man whom I had known in Charleston as a miserable drunkard; he was now sober, healthy, contented and happy. Thanks to the good sense and moral worth of the people, this stain on our national character is in a fair train of being obliterated in Newberry; thanks to a learned Judge, whose name will long be identified with this District and the Temperance cause—who is winning golden opinions all over our State, by his eloquence and philanthropy. He grappled with the monster when public opinion encouraged him to hold high his horns and wear a bold front, and is untiring in his zeal when the cause is on the ascendancy. His eulogy is written on many an intelligent and grateful mind, and he will, in after years, need no other monument than that of having effectually taught his fellow-men, by example and precept, to forsake the ways of error and sin, and walk in the paths of sobriety, virtue and happiness. But it may be asked what has Agriculture to do with the Temperance cause? I answer: employ a drunken overseer, and encourage a tippling-shop within reach of your servants, and you will soon discover.

In an Agricultural point of view, a considerable portion of Newberry District has gradually adopted a habit which I could wish were more generally imitated by the maritime portions of our State, whilst in some other respects I regret to state, their mode of agriculture is yet very defective. It is a community of farmers, rather than what usually goes under the name of planters. They generally reside on their farms, are their own overseers, and set an example to their labourers by working in the fields. They raise their own horses, and to a considerable extent their horned cattle and hogs, and might easily render themselves independent of Kentucky and the luxuriant soil of the West. They raise their own Indian corn, wheat, peas, oats, potatoes, and hay. They manufacture their own clothes, have in many cases their own tanneries, and black-smith-shops, and are dependant on our cities only for luxuries and fineries; in fact, they may almost literally exult in the words of the old farmers song:

“I raise my own lamb, my chicken and ham;
I shear my own fleece, and I wear it.”

Newberry, although comparatively healthy this season, has been usually regarded as a sickly District, whilst the neighbouring one of Lexington is considered more favourable to health. It is also stated, that in very wet seasons like the present, the reverse is the case. Lexington District is said to have been more unhealthy this season than that of Newberry. If this is the fact, and I have no reason to doubt it, I will venture to offer the following solution.—Lexington is a dry, sandy District, covered with a growth of pines, &c. adapted to the soil; but it is also, in general, a flat, level country. In dry seasons the arid soil soon absorbs the moisture, and the few rivulets are not calculated to engender the miasma so injurious to health. On the contrary, in wet seasons the flat lands retain the rains in standing pools, and the sluggish

streams are not calculated to carry off rapidly the superabundant moisture. Hence fevers naturally arise. On the contrary, Newberry is a far more hilly country. The brooks and water-courses having a greater descent, flow more rapidly. In wet seasons like the present a constant stream of water has kept running, allowing it no time to become stagnant. On the contrary, in dry seasons these brooks are lessened, become choaked with falling leaves and the remains of a decaying luxuriant vegetation; hence the sluggish streams, mill-ponds, &c. produce disease. A warm climate like ours need not necessarily be sickly. Many countries even within the tropics, with rich soils and luxuriant vegetation, are quite healthy. Cuba in its elevated parts, and with a rich, red clayey soil, very similar to that of Newberry, is regarded as one of the healthiest climates in the world. This fact is accounted for, from its hilly country and its pure running streams. Were the commissioners of the roads charged with the additional duty of keeping the streams open and the few swamps drained, and were the inhabitants a little more careful in the location of their residences, removing them from the vicinity of mill-ponds, swamps, &c., the fruitful sources of disease, one great evil under which this District labours, would, I think, be greatly mitigated, if not entirely removed.

Speaking of roads reminds one of another inconvenience to which the traveller is subject in this District. My greatest stretch of forbearance, with due allowance for the peculiar soil unfavourable to good roads, will not allow me to say less than that in good weather they are bad, and in wet seasons must be execrable. Their main-roads do not reflect much credit on the enterprise of the District, and their cross-roads are fifty per cent. worse. Jehu would soon break his neck over the stumps of the latter, and Hercules would have plenty of employment in raising the wheels from the bogs of the former. To a townsman, some of these clay-holes look frightful. They remind one of the reason an English officer once gave for their defeat at New-Orleans. It was not Gen. Jackson, he said, that killed them. It was the quagmire that drowned them. He had seen a soldier struggling in the mud. He ran to aid him; but when he arrived at the spot, his cap was only found—the body had gone clearly under.

The mode of tillage is similar to that of the other Districts in the State, all of which I consider defective. It is on the principle of getting all that you can from the teeming earth, and letting posterity take care of itself—exhausting the land by constant culture without enriching it by manure to any extent, or by a judicious rotation of crops. Hence, their new lands are far more productive than the old, and the rage for purchasing and clearing new lands without an attempt to resuscitate their nearly worn out soils; hence, this District, well adapted to the cultivation of wheat and Indian corn, does not, I am informed, average eight bushels to the former, and less than ten to the latter. Having myself seen growing on soils originally inferior to that of Newberry, extraordinary crops of sixty bushels of wheat per acre, and one hundred of corn, for which premiums were awarded; and having seen large fields where at least half that quantity was regarded as an ordinary crop, I could only account for this very great inferiority in our southern soils—on the ground of injudicious tillage, and a neglect in the proper application of manures. Some of the cotton and corn fields had been planted twenty years in succession, without a rotation of crops,

without rest, and without manure. In this way the best soil must become impoverished, and then, like reputation, can with difficulty and by a slow process be restored.

Cotton.—I was glad to find that Cotton was only regarded as secondary to the provision crop. It is the article usually allotted for the market after a sufficiency of grain and provisions are planted to insure an abundance of the latter. The variety generally planted, is that which goes under the name of Petit-gulf, which seems well adapted to the soil and climate of Newberry. I was informed that in several instances, the seed had not been changed for eight or nine years, and that the plant had not degenerated, a longer period than is considered advisable in the lower parts of the State, where the seed in general, I believe, is changed every four or five years. The cotton was finer than any I had seen in the low country; still the crop, owing to the wet season, was considered inferior, and the product, on an average, less than two-thirds in proportion to that of last year.

Corn and Peas.—The product in these grains was abundant, especially the latter. This may probably be ascribed more to the favourable season, than to any improved mode of cultivation. The crop of peas throughout the State has been immense. It is usually planted so late, as not to injure the growth of corn, and by shading the earth does not greatly impoverish the soil, requires but little labour, except in picking, and is admirably adapted to the fattening of hogs, and as a food for milch-cows, &c. Every planter should make an effort to have his corn-fields planted extensively with peas. The corn-crop on which we depend so much in the South, could, by increased attention, be made infinitely more productive. I doubt whether our lands can ever be brought to yield this product equal to those of the middle and western States, as our stalks being larger and taller, will not admit of being planted so near; still, manuring and a judicious selection of seed, might render the product more abundant. An extensive and successful planter of corn along one of the rich vallies of North-Carolina, informed me that he had adopted the plan of importing his seed-corn from Pennsylvania every two years, and by this means had doubled the product. The variety he selected usually goes under the name of Pennsylvania white flint. It has occurred to me, that this corn, after having been raised in North-Carolina, might, after the second year, be well adapted to our more southern climate. The transition from the northern States to South-Carolina, being too great for the first year, as I have noticed that the plants were usually diminutive and but a slight improvement in the product, while the quality is inferior to that of our Carolina flint-corn.

Rice.—The elevated hilly District of Newberry is not well adapted to the culture of Rice. I perceived it had been but sparingly planted here, and there in small patches for family use. No mills for its preparation exist, and the little that is raised is usually pounded by hand. The grain however, did not appear of an inferior quality.

Oats.—This valuable grain is raised in considerable quantities in this District, and I was informed that the crops had been good. Hence the secret of the fine appearance of their horses.

Wheat.—This article has been brought into very general cultivation. Newberry is in fact well adapted to the growth of Wheat, and with proper attention it might be raised to great advantage. I heard no complaints of the ravages of the so called Hessian Fly—that pest of the

Northern Farmer. It is found necessary however, to have the Wheat ground soon after harvest, to preserve it from another troublesome insect. In Europe on the contrary, stacks of Wheat frequently remain in the straw for three or four years, and the threshing only takes place when the state of the market encourages a ready sale. The mode of culture however, would unhesitatingly be condemned by every judicious Northern or European farmer as improper and slovenly in the extreme. In those countries celebrated for the production of abundant crops of Wheat, the land which had during the preceding year produced hay, or been kept as pasturage and now is covered with a compact mass of grass and roots, receives a deep ploughing in the spring, when the roots and other vegetable matter having been carefully covered by the furrows are left to decay. After a few months the ground is thoroughly manured and then receives a cross ploughing. At the time of sowing which is usually a month or two earlier than with us—about the middle of September it is ploughed for the third time, when it is sowed in drills—from two to three bushels of seed to the acre in Europe; and broad cast; and from one to two bushels per acre in the Northern States. In the Northern and middle States the grains are rolled in gypsum (Plaster of Paris,) previous to sowing—lime is more generally used in Europe—but not applied to the grains. In Newberry, however, the process is surprisingly simplified, and the Agricultural traveller seeks to attain his object not by following the beaten path, but by a short cut across the woods. The lands which were then sowing, had neither been subjected to the mellowing process of plough or harrow. No stable manure had been applied. In some instances Cotton seed, (an excellent manure, but which cannot from its scarcity be extensively used,) was sown broad cast over the fields. Corn stalks weeds and grasses covered the lands, and among these the seeds were scattered. The plough was now run through this uneven surface of corn beds, pea vines and crab grass. A primitive harrow, viz; a tree top was now dragged over the field, and the whole labour was ended, and the prospects of the husbandman for an abundant crop were left to the care of providence. Providence is full of beneficence—but he has somewhere told us “if any work not neither should he eat,” and universal experience testifies that we cannot reap that whereon we have bestowed no labour. Now my surprise is, that such ragged fields and slovenly modes of culture instead of averaging 7 or 8 bushels to the acre, should produce as much as the seed sown on the uncultivated ground. It appears to me also that the period of sowing was rather too late—the quantity of seed too small, and that sufficient attention had not been paid to the selection of those varieties of seed suited to the soil and climate.

Rye—is but sparingly cultivated in this District, it being the general impression, that as much Wheat can be produced on an acre as Rye, whereas, in the New-England States and New York, lands which are unsuited to the growth of a moderate crop of wheat produce a much larger quantity of Rye. It is there less subject to the depredations of the hessian fly and other insects, as well as more hardy during the vicissitudes of the seasons, and is consequently regarded as a surer and more abundant crop. As winter pasturage, Rye possesses many advantages, particularly in our southern climate, where it is seldom injured by frost, and not covered as in the North with snow. Calves—young cattle and sheep may thus have the advantage of pasturage during the winter and

early spring, for which as yet we have found no substitute in our Southern States.

Buckwheat—is not, I think, cultivated in this District. It is probably better adapted to a Northern climate. I have however, noticed it on the Mountains of Virginia and North Carolina, and it might succeed in Newberry. When sown in spring it does not produce well in any part of America. The time for sowing it in the Northern States is from the 1st to the 7th of July, and much importance is there attached to the time of sowing. I have known some farmers so wedded to their opinions of a particular fortunate day, that their patriotism has been made to give way to their interest and they have for many years sowed their Buckwheat on the 4th of July. Three or four weeks later would probably suit our warmer climate. Most persons are ready to sing the praises of Buckwheat cakes.—In the North the grain is also boiled for fattening hogs, and is fed to poultry.

Turnips—with all their varieties are well adapted to the soil of Newberry. The few patches I saw had been sown only for table use—they appeared to be productive, and added a richness to the surrounding yellowness which the frosts of autumn had produced. Turnips are rarely cultivated in any part of our country as food for cattle—on the contrary, in Europe this crop is regarded as essential to their sheep and horned cattle. They admit that they have found no substitute in all the range of cultivated vegetables that could be exchanged for it. In Newberry the cattle suffer more in winter than the horses. The latter have an abundance of corn, corn blades and hay—but the former are fed on corn shucks, and the scanty produce of withered fields. Hence the secret of their good horses but indifferent cattle. I cannot too earnestly recommend turnips, rutabagas and carrots as a field culture for the feeding of stock. The dairy would profit by it, and instead of turning a wistful eye to the Kentucky drovers they could easily supply themselves and the markets of neighbouring Towns with good beef.

Potatoes.—Both the sweet and Irish Potatoes succeed tolerably well in this District, and the crops (which were on a small scale,) were said to have been good. I perceived of the former, that the variety called leather coats, were the most common, and that although the potatoes were large the vines were less abundant than in the lower countries. The best potatoes had been produced from sprouts instead of layers. An intelligent farmer mentioned to me that he left his Irish potatoes in the ground during the whole summer, and only dug them as occasion required, and found that in this way they were better preserved than by digging them after the vines were decayed. In the maritime Districts the Irish potatoes becomes watery and decays in the latter part of the summer, and it is found necessary annually to import the seed. It might be advisable in the rich and clayey soil of Newberry to try an experiment with some of the superior varieties of potatoes, such as the pink eye, which is much prized in New York—the Albany kidney—the white bread fruit—early Wellington—matchless kidney, and a host of others that are far superior to the varieties at present cultivated.

Pasturage.—This is an ingredient in the success of the farmer which appears to have been every where overlooked in our whole Southern country. We have no winter pasturage, and hay is made too sparingly. Our lands are not allowed to have the advantages which other countries derive from the decayed leaves and roots which are so abundant and nu-

trative to the coming crop when the hay fields and pasturage grounds have been ploughed under. This is an evil against which our barren fields complain—which is causing our staples, Corn and Cotton, to refuse to grow at our bidding, and which has driven many of our farmers to abandon their home and friends and go on a pilgrimage to seek an El Dorado amid the unhealthy swamps and parched prairies of the West. There is an old proverb “an ounce of prevention is worth a pound of cure,” which is very applicable here. “I have worn out my constitution,” said a debauchee, “and now Doctors and Mineral Springs can do me no good.” Many of our Southern Planters have adopted the erroneous idea that our lands are sooner worn out than those of Europe and the Northern States of our own country, where the fields have been under cultivation for ages past and are now more productive than ever.—They ought to be made sensible, that the mode of cultivation pursued among us would impoverish the land any where. Were a Pennsylvanian or an English farmer to sow Wheat or plant Corn (the latter is not cultivated in England,) on the same field, for ten or a dozen years in succession, he would know before hand that he would exhaust the soil and render his land unproductive.

I would be glad to see the following experiments tried as a grass crop:—To one and a half bushel of Wheat which I would recommend to be sown to the acre, let the following quantities of grass seeds be mixed.

Orchard Grass, (<i>Dactylis glomerata</i> ,)	2 lbs.
White Clover, (<i>Trifolium repens</i> ,)	3 “
Red Clover, (<i>Trifolium pratense</i> ,)	3 “
Rye Grass, (<i>Lolium perenne</i> ,)	12 “

I should prefer the Italian Rye Grass (*Lolium Italicum*,) to the common Rye Grass, but fear it may not be obtained so easily. These and other Grass Seeds may, I hope ere many weeks, be procured at the Agricultural Repository in this city. If the season is too late for sowing them this autumn, they may be sown with a crop of Oats in the Spring. I have only ventured to add a small quantity of Red Clover Seed, as I am aware of the common objection that it is not adapted to our warm climate. It however is cultivated in the warmer parts of Italy. The Orchard Grass and White Clover we all know succeed well with us, and I have scarcely a doubt of the success of the Rye Grass. The Rice Grass (*Leersia Oryzoides*,) which makes excellent hay, is found flourishing along the streams and low grounds of Newberry, but cannot be cultivated on high grounds. The Crab Grass and Crow-foot are the only species which the farmers at present convert into hay. They are very valuable, but to produce good crops the ground must be annually ploughed and manured.

Gardens.—I had not the pleasure of seeing any ornamental flower gardens, nor were the grounds in front of the dwelling houses laid out with that taste which gives such a charm to the English landscape, and is so ornamental around the farm houses in New England. The Rose and Eglantine clambering around the piazza—the little vines, trellis's and flower pots are always indicative of a degree of taste and refinement which the traveller delights to witness. The few vegetable gardens which I saw contained a tolerable abundance but of no great variety.

A CHARLESTONIAN.

[TO BE CONTINUED.]

For the Southern Cabinet.

ACCOUNT OF ORANGE PARISH.

WE have obtained from a friend, the following account of Orange Parish; and we solicit from other gentlemen, similar accounts of the various sections of country in which they reside. [ED. SO. CABINET.]

The north-west part of this Parish was attached to Lexington judicial District in 1830, but as an election District, it is still entire. It is fifty-five miles long, and its greatest breadth about thirty miles—bounded on the North by Lexington, West by the South-Edisto river which separates it from Barnwell, South by St. George's Parish, and East by St. Matthew's.

Surface.—A line running nearly East and West one mile below Orangeburgh Village, separates the rolling from the level lands. To the North of this the country is elevated and broken, and abruptly rises, in one mile, forty-three feet; whereas, below this line it is nearly level, the average elevation for ten miles not exceeding five feet per mile, and interspersed with ponds and bays.

Soil.—May be considered in three classes:

1. The swamps contiguous to the rivers and creeks.
2. The broken lands above the Village.
3. The level lands below.

In these are other varieties modified by locality, the substratum, &c.

The river lands are not extensively cultivated, but from the ease with which they may be secured against the water, there is no doubt they will be brought into requisition and rendered valuable, unless a conviction, which is very general, that the up-land planter is more certain of success in the end, shall obtain so strongly as to check improvement of the swamp-lands.

The alluvial deposite of the rivers is, perhaps, more combined with sand than the Santee and Congaree, but its adaptation to the growth of Cotton is thought to be better.

The broken lands are esteemed productive, except in situations where the sand predominates, and where a judicious system is followed they yield ample harvests, and have, in a few years, greatly enhanced in price.

The level lands retaining manure, and originally of good quality, seldom fail in producing corn and cotton, and large crops are made by those whose system is judicious. They are seldom corn-buyers.

Lime is found in various combinations.

Water.—The North-Edisto almost intersects this Parish, and with the South-Edisto, and Four Holes, and their tributaries, furnish extensive water power, which is applied to saw and grist mills. Of the former there are fifty-two on the waters of North-Edisto, and as many on the South, which furnish annually upwards of fifteen millions of feet of sawed lumber that finds a market in Charleston, Beaufort, and on the sea-board. The annual income from these mills is not less than \$200,000. Those on the South-Edisto in 1835 sawed upwards of nine hundred thousand feet. The cost of construction of a mill, including dam, &c. is about two thousand dollars. It is, therefore, a large and important

interest. Besides boards, scantling, &c. the Pine forests bordering the Edisto have, for many years, supplied a large quantity of ranging or hewed timber, which is taken to Charleston in rafts.

Grist mills are numerous, and so located as to supercede (especially in the upper part of the Parish) hand and horse mills. They are generally adapted to the manufacture of wheat, and more than one thousand barrels are made; some farmers supplying their consumption.

Minerals.—Marl, lime-stone, iron-ore, sand-stone, &c. Lime is found frequently on the surface, and a quarry seven miles East of Orangeburgh Village has been worked for upwards of fifty years. It is used as a cement in building, and is applied to the making of indigo, and is sold at about thirty cents per bushel. The oyster and various other marine shells are found here.

Extensive beds of feruginous sand-stone are in the neighbourhood of the Village, which is used in the construction of culverts on the Rail-Road.

Arable Lands.—Cotton, corn, rice, indigo, wheat, &c. Cotton and indigo are grown for market. The cultivation and manufacture of the latter have never been abandoned since the Revolution. It is planted mostly on the sandy and poorer soils, and on these is thought to be more profitable than cotton. Two species are planted—the tame and wild. The latter is preferred, yielding a better dye, and re-producing for six or seven years, thereby saving the labour of sowing, &c.

In 1831, upwards of nine hundred acres were planted in indigo, which produced about twenty-seven thousand pounds. The price has varied from fifty cents to one dollar. Since 1831, there has been no material change in this cultivation, except that the high price of cotton, and the severe winter of 1835, which killed the plant of the wild indigo, have combined to diminish the quantity to a small amount; but it is supposed that the crop of the last year exceeded twenty thousand pounds, and the state and prospects of the cotton market will probably add very much to the last year's product.

Every one familiar with the history of South-Carolina, knows that indigo was cultivated here at an early period, and, till cotton superceded it, made a large item of our exports. I have seen a single account sales of indigo made in 1779, by Messrs. Heriot and Tucker of Georgetown, of 13,657 pounds. I have also before me an original paper, under the hand and seal of Frederick the Great of Prussia, dated in 1752, given to a gentleman who had been in this country, and on his return indulged the hope of introducing the cultivation of indigo in Prussia. If you deem it of any interest, I subjoin a translation:

“His Majesty the King of Prussia, our most Gracious Sovereign, having seen, by the very humble representation of the Senior C. the intention which he has, of establishing in his States a plantation of Indigo, would testify to him his satisfaction, and the pleasure he would have in seeing in this country an establishment of that kind. But as before doing any thing, it is proper to know whether the nature of the soil and our climate are fit for the cultivation and production which he proposes, His Majesty would see it with great satisfaction, if the said C. would, before undertaking his enterprize on a large scale, commence by making certain experiments in detail, in order to make him sure of his project, and ascertain if nothing oppose the success of this plantation.

Then, His Majesty will be well disposed to accord to him those privileges which he can reasonably claim.

"At Potsdam, 18th March, 1752."

[SEAL.]

"FREDERICK."

In regard to the product of Cotton per acre, or hand, I have no satisfactory information, and indeed it varies so much from the different causes which influence its production, that single instances are all that can be given. A gentlemen within four miles of the Village, made the last year, five bales to the hand, and a full supply of provisions.

The cultivation of Rice is increasing, but so far it scarcely supplies the consumption of the Parish.

A better system of husbandry is manifest, and the great importance of rest, rotation, and manure, begins to engage the attention of planters, and wherever judiciously pursued have greatly improved lands which had been considered exhausted, and by establishing the intrinsic value of our lands will be an effectual barrier to emigration.

On the subject of live Stock, implements, woods, enclosures, &c. I can add nothing to what you have said in your Agricultural Survey of St. Matthews, which from its contiguity varies, in these respects, little from this Parish.

In conclusion, I regret that my information is not such as I know a planter most desires, and can only promise, in future, to interest those in your valuable work, who in every thing except an ardent wish to promote the Agriculture of the State, would make themselves more useful contributors than

Your obed't serv't,

A.

For the Southern Cabinet.

STOCK CATTLE.

Charleston, 26th August, 1840.

J. D. LEGARE, Esq.,

Sir:—You requested me to give you a list of the improved breed of Stock Cattle imported by me in last November; I herewith enclose to you a statement of the same.—

Pedigree of thorough bred, improved Durham Short Horn Bull COECIL, a red and white Bull, calved 6th June, 1838, bred by Thomas Rotch, Esqr., Clermont, Pennsylvania: got by Melbourne, (Herd-book, 2389,) by Monitor, (h. b. 2337,) out of Violet by Memnon, (h. b. 2294.) The dam of Coecil is Ruby, sent to this country by Mr. Whitaker in 1837. Got by William, (h. b. 2839,) dam by Wellington, grand-dam by Blaize, &c. see Coates' Herd-book, where his pedigree can be traced back for fifty years from the most thorough bred Stock in England. This Bull stands in the City of Charleston, in Montague-street opposite Mr. Whites.

HECTOR, white and red, calved 26th July, 1838. Dam, Lady Olive Branch, imported by Mr. Craige; sire, Hector, an imported Bull. This

Bull stands at my plantation on John's Island, ten miles from the City of Charleston, and all cows sent there to him will be pastured free of expense for the time.

ROVER, red and white, no horn, calved 16th May, 1838, dam C. J. Wolbert's, Esq. of Philadelphia, half-breed cow Diana; sire, Mr. Barney's Defiance. The dam of Rover is celebrated for the richness of her milk. It was from the milk of this cow that, C. J. Wolbert, Esq. obtained the medal for making butter, the milk of his cow Diana having produced more butter than that of any cow that could be brought in competition with her in Pennsylvania. The Bull Rover stands at Geddes' Hall in St. Andrew's Parish, four miles from the City of Charleston. All cows sent to Rover shall be pastured for the time free of expense, and should it be required they will be stalled and fed at a moderate expense, and every attention paid them by an experienced groom.

FROLIC, red and white Bull calf, calved 12th October, 1839, dam, Victory by Col. Powell's Frolic's grand-dam, Beauty, by Bishop, bought by Mr. Hamilton of Col. Powel, dam of Beauty, a French cow imported by Mr. Hamilton. Frolic was brought here in November last with his mother; she died in February, and he was then fed a little—the grass grew when he was turned out with the native cattle; he is now running in the pasture, and is as large as any common Bull calf at two years old.

SCOTCH CILO Cow, a singular looking animal. Her legs are so short that the top of the back is but two feet and eight inches from the ground on which she stands, yet the body is as large and as long as a common cow, and the bag is so large that when full of milk it reaches within six inches of the ground; the calf has to kneel that it may suck her. This breed of cattle are great milchers, and are said to be very hardy. I am told they are raised upon the poorest pastures in Scotland; so far she stands our climate and pasturage extremely well, for she has been running out with my native cattle, exposed to the sun, for the greater part of the winter and summer, and is now feeding upon grass out in the old fields around; although she had an attack of fever from the extreme heat of the sun in July, which my groom succeeded in curing, and she is now in a thriving condition on grass alone. She is with calf from my thoroughbred Bull Coceil.

CLARA, calved 16th October, 1839, dam Scotch Cilo Cow, by a fine bred Durham Bull. This calf came with the mother in November last, was weaned at six months old, is now in fine order and fed on grass.

I have also imported an Alderny cow and calf; the cow gave thirty quarts of milk per diem.

Some others that I imported have died from fever, brought on by the difference in climate, though I used every precaution and made use of every remedy that I could think of.

Sheep.—A pure South-down Buck and Ewe from the farm of Mr. Isaac Newton, Springfield, Delaware County, (Pennsylvania,) three years old last spring. This Ram was awarded the premium at the Agricultural exhibition of thorough bred Stock, under the direction of the Philadelphia Agricultural Society, last October, 1839.

Also, a pure Bakewell Buck, and a prime Broad-tail Buck from the same gentleman. The Broad-tail Buck measures when fat, twelve inches across his tail from skin to skin, and is said to be a very hardy breed of sheep.

Three pure South-down Ewes, from the farm of W. Barber, Esq., two years old this spring. A Buck and Ewe of the Broad-tail breed, from the farm of a friend in Chester County, (State of Pennsylvania.)

A pure South-down Buck and Ewe, two years old, and a Bakewell Buck from a farm in New-Jersey.

Horses.—LADY BERTRAM, five years old; sire, Bertram. I have her full pedigree; and she is now in fold by Major.

ARAB, a sorrel Colt, four years old the last June, bred by James Caldwell, Esq., of Virginia; sire, Arab and dam by Plough-boy.

Hogs.—Four Hogs, from Chester County, known in Pennsylvania by the name of Chester County Hogs, celebrated for attaining a great weight at an early age. When I purchased these, they were pigs of five months old, and averaged over one hundred and thirty pounds each. I have one now aged fifteen months, that weighs three hundred pounds, fed principally on grass all summer. I would not give him grain, fearing that our climate might be too hot for him.

I imported this thorough breed, to improve the Stock on my plantations, but my farming spirit will not allow me to keep them solely for my own use. I have also a number of Pigs and Lambs of their breed, and the next spring I expect to have a number of calves from the before mentioned Stocks, and will dispose of part of them.

Wishing every success to the Agricultural and Farming interest, as also the improvements of all kinds of Farming Stock, especially in the State of South-Carolina,

I remain respectfully,

Dear Sir,

Your most obed't serv't,

GILBERT C. GEDDES.

AN IMPROVEMENT IN FATTENING HOGS.

Maury County, (Tenn.,) March 23.

Mr. Clayton:—It is manifest to every person that there is a great lack of economy in the wasteful manner we commonly feed our stock in Tennessee. I am satisfied that no one is more guilty in this respect than I am myself. I believe, with a little trouble and trifling expense, we might save full one half the provisions we feed to our stock every winter. In these hard times that would help very much to get us out of our embarrassments.

So fully was I convinced of this that I determined the past winter to try to make an improvement in feeding my fattening hogs. My practice heretofore was like my neighbors generally, and I believe almost every person in Tennessee fatten their hogs in the same way. I usually put my hogs up in a small lot with water in it, and throw them as much raw corn in the ear as they will eat. This with a little salt now and then, is all they get, and in the course of six weeks or two months they are regarded as in good pork order, and ready for the knife. The last fall my hogs were pot up in the usual way in September. The number I do

not now recollect. But I observed particularly the amount of corn they consumed each day. They were fed by throwing the corn to them raw in the ear. The corn was carried in a large cotton basket, which I supposed would hold about two bushels. This nine times full was given them every day. It was about as much as they would eat. I had previously engaged Col. D. Looney to have some large kettles cast at his furnace in Wayne, of the size and dimensions that would accomplish the objects I had in view. My design was to boil all the corn I gave my hogs, and by having the kettle of suitable dimensions, to use it to scald them in when killed instead of a trough or hogshead. The kettles were not ready until I had fed my hogs some time. I at length got one, set it in a very simple furnace, which did not take thirty minutes to construct; and from that time until my hogs were killed, they were fed three times a day on corn well boiled. The corn was taken to the kettle in the same basket and put in it until it was full, the kettle then filled with water and a fire kindled under it. This was sufficient. If at night, it would be well cooked by morning; and if in the morning, it would be ready by the middle of the day. One not accustomed to it would be surprised to see how little fuel was necessary. A billet not larger than a common fence rail was entirely sufficient to cook one mess. When the kettle was emptied it was immediately filled as before, and a small armful of any wood was sufficient to cock it suitably by the next feeding time. In this way it required but six baskets full in the day. Before I got the kettle it required nine. Here was a clear saving of thirty-three and a third per cent. If one should have a lot of hogs that would ordinarily consume in fattening one hundred and fifty barrels when fed raw, he would save by the process of boiling, fifty barrels, which would twice over pay the price of the kettle. Mine, I believe, cost twenty-five dollars. Had I got it when I first put up my hogs, I am certain I would have saved fifty barrels of corn.

At killing time the kettle was of great convenience. Its oblong form makes it very suitable to scald in. Formerly the preparation for killing was a great trouble. We would make a large heap and put on it many rocks, and after it had burnt so as to heat them they were put in a hogshead of water to heat it—and after they were removed the water was ready for scalding. All this took much time, and was a great trouble. Now with the kettle quite a small fire is sufficient, and when once heated it can be kept in a good scalding condition throughout the whole day; you have nothing to do but make the water boil, and then put in the hog, and in a few minutes it can be taken out, and you may put in another, and so on until you are done. There is no necessity for delay. Keep the fire constantly burning, and as fast as you can kill you can scald. This I found to be a great saving of time and trouble, and a sufficient reason of itself to justify the purchase of a kettle.

After my hogs were slaughtered the kettle still continued to be of great use. It is excellent to prepare food in for milk cows and any other stock that are fed on corn.

I have often heard it said that one fact is better than many theories. Here then is a fact. I have tried it, and saved precisely one-third of corn—more than enough the first winter to pay the cost. If any one should doubt it, I would advise him first to try it, and I am sure he will then believe.

WILL. E. KENNEDY.

DUTCH DAIRIES.

A writer in the Journal of the English Agricultural Society, in an article entitled "Rural Economy of Schleswig, Holstein, and Lauenburg," gives an instructive account of the dairies of the Hollanders and their mode of making Butter, from which we extract the following :

"The pride and boast of the Holsteiner in his dairy ; and the fame of Holstein Butter, which, if we except that made in Holland Proper (or Delfland,) may well claim to be the best in the world, not only justifies his preference, but may render a sketch of those peculiarities of management, by which the Holstein dairy system is more especially distinguished, neither uninteresting nor useless to the English Farmer. These may be chiefly classed under four heads, viz : the buildings and utensils ; the time of milking, and number of hands employed ; the management of the milk ; and the mode of working, salting and packing the Butter.

The buildings indispensable to a large dairy (which varies from 100 to 400 cows) are, a milk cellar, a butter cellar, a churning house, (and closely adjoining the horse-mill, by which the operation of churning is invariably effected,) a cheese room, and a kitchen, in which not only the various utensils are washed, but the food cooked for all the persons immediately engaged in the dairy-work ; to which must commonly be added their sleeping and eating apartments, as, on large estates, the whole of the establishment is usually kept apart from the mansion house. The size and site of the milk cellar are esteemed matters of first rate importance : it ought to front the north ; be shaded from the southern sun by rows of trees—elder being especially selected for this purpose, and indeed placed if possible near the windows, on account of their influence in keeping off the insect tribes ; and a thatched projecting roof is preferred, affording greater protection from the heat ; while, in choosing the site, peculiar care is taken to place the dairy beyond the reach of every thing calculated to generate bad odors, or in any way taint the atmosphere. The size of the milk cellar must necessarily be regulated by the number of cows ; but it should always be calculated to contain the produce of four milkings ; and as the milk dishes usually occupy a space of two feet square, the produce of 100 cows, giving on an average 8 quarts per day, (a large average for the cows of this country throughout the year,) would fill 50 milk dishes at each milking, and would require a ground surface of 500 square feet, as the milk dishes are invariably placed on the floor, the amount of each milking a little apart ; and there must unavoidably be spaces left, to enable the dairy maids to go through their various operations of skimming, sieving, and removing cream, &c. The floor, though sometimes flagged, is more generally of brick, neatly fitted, so that no water may lodge in the joints ; and always gently inclined, with a grated opening at the lower end, to facilitate the mopping and washing of the floor, which is never omitted to be done twice a day, notwithstanding that every avoidable impurity is carefully guarded against, and every drop which may fall at the time of the milk being strained, is instantly wiped up. A great improvement has been recently made in some newly arranged dairies, by dividing the floor into compartments with brick ledges, from 3 to 4 inches high, between which the milk dishes stand ; and the compartments (the lower extremi-

ty of which is fitted with a small sluice) being filled by means of a pump, with cold water twice a day, the milk is preserved so cool as to prevent all approach to acidity for several hours longer than when placed on a dry floor: thus affording, even during the summer solstice, sufficient time for a complete separation of the milk and cream, without which the full proportion of Butter cannot be obtained. For effectuating the same desirable result, ice is frequently resorted to in sultry weather, either by dropping a piece of pure ice in each milk-pan, or by placing a pailful in the dairy, which, by giving off its cold, sensibly lowers the atmospheric temperature.

It is considered necessary that the milk cellar should be sunk from 3 to 4 feet in the ground; be from 16 to 18 feet high (the best have an arched roof, as being more conducive to coolness than boards;) and be furnished with two rows of windows, (and if possible, on three sides, north, east and west,) to secure a thorough air. The lower range consists of wooden trellis work, provided inside with gauze frames to exclude insects, and outside with hanging shutters, which can be lowered and elevated at pleasure. The upper range is furnished with glass sashes when light only is requisite, which are exchanged for gauze frames when more coolness is desirable. The butter-cellar also, must be light, airy and cool; being likewise sunk in the ground, and the same precautions adopted as in the milk cellar, to secure an abundant current of pure air. In it the butter, when carried from the churning house, is worked, salted, and packed; and the filled butter casks ranged, on clean boards, somewhat elevated above the floor, to admit a free passage of air, are weekly turned and wiped.

Next in order comes the churning house, which differs in no respect from similar arrangements in England, excepting that, of late years, the perpendicular movement of the churn staff has been exchanged for the rotary,* which is found to churn in a shorter time, and with less risk of producing even in hot weather, what is called oiling,

The Cheese room is never admitted near either milk or butter cellar, and is, in newly arranged dairies, placed as far as may be from them. In fact, as cleanliness forms the great object of the Holsiein dairy system, the closest attention is paid to guard against every impurity, and to remove every thing from the vicinity of the dairy which could, by possibility, exercise a sinister influence on the very susceptible substances of milk and butter; which suffer, to a degree, those unaccustomed to observe it would little suspect, from a tainted atmosphere. As the preparation of cheese is better understood in England than here, I will only mention that three sorts are made—sweet milk, skimmed milk, and occasionally what is termed cream cheese; and shall now proceed to describe the management of the milk, first enumerating the number of persons required. These consist, in large dairies, of a meyer or overseer, a cooper, one or two cow herds (as may be requisite,) one or more swine herds, an upper dairy woman, and dairy maids in the proportion of 1 to every 18 cows. The overseer's duty involves a general charge of the cattle, whether in health or sickness, with a competent knowledge of their diseases and the remedies; he is responsible for the swine being properly cared for; that the calves, whether fattening or rearing for stock, are regularly and suitably fed; that the cow herd does his duty; that the

* Seventy two revolutions per minute.

hours of milking are punctually adhered to; and that every thing and every person is in proper place and keeping. He must further pay strict attention that the cows are milked thoroughly out, on which so very much depends; as not only the cows which is allowed to retain any portion of milk diminishes her produce by so much from day to day, but the last, being by far the richest part, a loss of butter is incurred, much more than proportionate to the quantity of milk, by this culpable negligence or laziness. According to the observations of an accurate examiner, Dr. Schubler, the first drawn milk contains only 5, the second 8, and the fifth 17 per cent of cream! If the number of cows be not above a hundred, the overseer can also undertake the cooper-work; which, when wooden milk dishes are used, in addition to the cream barrels, milking pails, and butter casks, required in the course of a year, is a consideration both of time and expense. But in large dairies, a cooper is kept in addition, who, however, must likewise milk a certain number of cows, assist in carrying the milk, feeding the cows when housed, or any other dairy work which a man is capable of. The wages of these two persons vary according to the extent of the dairy, but may be averaged the first at 60, and the second at 40 dollars per annum.

The dairy maids, besides milking, cleaning the vessels, &c., work in the garden in summer, spin in winter, and wash, bake, brew and cook for their own establishment, under the superintendence of the upper dairy woman, who is by far the most important personage in it, as on her skill, attention and diligence depend, in a great measure, both the quantity and quality, and by consequence, the profit of the produce. She must not only thoroughly understand, but accurately observe, the moment when the milk should be creamed; the degree of acidity it must attain in the cream barrels; its temperature, whether requiring the addition of warm or cold water to the churn, as well as the all important operations of kneading, beating, salting and packing the butter. She must not only be punctiliously clean herself in person and work, but keep a strict eye over the cleanliness and order of her subordinate maidens.

In very large dairies the upper woman has full employment, without milking, and needs the assistance always of one, and sometimes of two of the more experienced dairy maids, in butter and cheese making; but in smaller establishments she milks a certain number, generally 10 cows, while each of her subordinates have 18; her wages are usually 55 to 60, that of her chief assistants 22, and that of the others 18 dollars per annum.

[TO BE CONTINUED.]

For the Southern Cabinet.

OF SUCKERS ON CORN.

Mr. Editor,—In the last number of the *Cabinet*, in your article on the "Agricultural Survey" of the country about Pedee, you seem to regard the fact, of Suckers on Corn bearing Ears at their proper places, as before unknown to you;* and you ask, if it is not one of the peculiarities

*It appears to be equally unknown to the planters of the sea-board. [ED. SO. CAB.]

of the Corn cultivated by Col. Williams, in producing suckers bearing ears? I can easily answer that question by observing, that it is not peculiar to Col. Williams' species of Corn, unless his and mine are the same, which I think scarcely probable; and it has been my settled conviction from several years close observation, that Indian Corn, whenever there is a superfluity of strength in the soil for its own wants, will send out suckers, which if suffered to remain, will not only do no injury to the parent stalk, but will, in corn and blades, produce more than the original stalk without them. That this is no newly formed opinion of mine, you can, by referring to the June number of the *Southern Agriculturist* for 1838, in an article on this subject, see that I came to the same conclusion from my first year's observation.

Corn highly manured, when not planted too thick, will begin to send out suckers when about from six inches to knee high, and if those early suckers are suffered to remain, and if the field is well cultivated, they will grow off rapidly, detach roots of their own, though they adhere still to the parent stalk; tassel, shoot, and ripen, at the same time; and if the suckers appear very early on the Corn, there is often some difficulty in discovering which is the parent and which the offspring.

In 1838, I made the fairest experiment that could be, with suckers. It was a dry Spring, and a great many appeared on my manured Corn. In a field of thirty-five acres, I left eight rows lengthwise throughout the field with the suckers on; from the rest of the field I had them taken away; and I was so fully satisfied with the result of that trial, that I have never taken them away from my Corn since. The quantity of fodder was so much greater than upon the adjoining rows, that there could be no doubt of the propriety of leaving suckers to produce a large yield of fodder, and that nothing was lost in the produce of grain, the following extracts from my Agricultural Journal of that year will show. The Corn was planted four and a half feet each way, one stalk in each hill, was well manured with Cotton seed, stable and yard manure, in nearly equal proportions, and was carefully cultivated.

"August 15.—I counted nineteen ears of Corn upon eight hills in ———'s field, in one place; upon which the suckers had been left. On the same row adjoining, I counted sixteen ears, upon eight hills, from which the suckers had been taken away.

"In another place, I counted upon eight hills nineteen ears upon the stalks with suckers, and thirteen ears on the same row on eight hills upon the stalks without.

"In another place fifteen ears upon the stalks with suckers, and twelve on those without.

"The fodder on the eight rows throughout the field must have been treble as much as upon any other eight rows in the same field."

"November 17.—Measured the Corn taken from thirty-two hills (four rows of eight hills each) upon which the suckers had been left, and thirty-two hills adjoining (of four rows, eight hills,) from which the suckers had been taken away, and the result was as follows:—The stalks *with suckers* made sixteen quarts and half-pint (of shelled Corn,) and the stalks *without suckers* made even sixteen quarts."

In the same field that year, I remarked a stalk that had two suckers, and there were six good sized ears to the hill—two on the parent stalk and two on each sucker. I showed it to several of my neighbours, and they thought the produce not only of that hill, but of the whole eight

rows upon which the suckers had been left so remarkable, that some of them thought it was a peculiarity of my Corn, as they said they had never observed more than the worthless efforts to produce a few grains among the tassel in their own Corn. I was able, however, to satisfy them that that was owing to their having taken away the first suckers, and the second growth was too late to produce any thing more.

In the following year, 1839, a great many suckers appeared on the Corn in the same field, which was manured and cultivated in the same manner as the year before, all of which were suffered to remain, and I made a larger crop than ever upon that field.

This year, 1840, but few suckers appeared on any of my Corn. I have attributed it to the unfavourable nature of the Spring for Corn, which has confirmed my previous impressions, that the appearance of suckers is an effort of nature to relieve the plant of any superabundance of nutriment.

In conclusion, I would remark, that I have yet to see Corn that has been well cultivated, at all injured, by the early suckers being left upon them.

COTTON.

Orange Parish, Oct. 22, 1840.

DESULTORY HINTS TO SOUTHERN PLANTERS,

BY THE EDITOR.

On Improvement of worn out Land by Green Crops.—To every Planter residing in the Atlantic States it is becoming daily a most important question, how we shall restore the fertility of our worn out fields, which by imprudent culture have become almost worthless. In thickly settled countries, where the farms are of but moderate size, and the fields small, the manuring of one entire crop may not be so difficult, but when our fields are of the size of many northern farms, this is no easy task, and the planter is too apt to consider it as a hopeless business, and thinks his only resource lies in clearing new ground and abandoning the old, as fast as worn out. Unfortunately, for this State at least, this has not only been thought, but acted on, and even in the present day there are not wanting many, who ridicule the idea of improving our plantations, and a writer in the Carolina Planter, goes so far as to say, "Show me one of those plantations which have been 'improved,' as the phrase is, for a series of years, and I will show you in three cases out of four a moth that has made a monstrous hole in the owner's pocket. I know tracts of land on which a cool \$100,000 have been expended, that will not now command \$10,000, and would not before the pressure began." Now we think it would be no very difficult task for us to show him many, which have been "improved" in every respect, and that brought about principally by attention to manuring. That there are many who go to work injudiciously, and consequently impoverish, instead of enriching themselves, there can be no doubt, and we agree entirely with the writer in the opinion that "a fondness for reviving, reclaiming and improving lands, unless very judi-

ciously regulated, will always prove as fatal" as a passion for house building; but beyond that we cannot go with him, and we regret exceedingly the attempt he has made to ridicule the efforts that are making to renovate our impoverished lands. The whole article seems to us liable to many objections, but as it has not been re-published in this journal, we pass it by, merely with the observation, that if his views were adopted generally by our Planters, our State would soon become a deserted waste. But to return from this digression. Is it possible for us to renovate our impoverished fields so as to render them worthy of being cultivated, and if so, how is this improvement to be effected, and can it be done at a cost which will warrant it?

These are important questions all will admit, and in the solution of which every planter is deeply interested. We do not propose discussing this subject in full, but merely making some suggestions, which we think may aid in bringing it about. It is acknowledged on all hands that as long as our present system continues, it is utterly out of the question for us to manure from the farm yard *as they should be*, the various crops which we are compelled to cultivate either for market or home consumption. It is true, (as we may hereafter show,) we do not avail ourselves of many of the materials which are abundantly scattered around, which might be readily converted into most excellent manures. These no doubt in time, will be more highly appreciated and made use of, as the importance of manures becomes more generally understood. But even then, the quantity of ground cultivated to the hand, is so large, that it cannot be manured in the usual way. What then is our resource. We unhesitatingly say, that by judicious rotations, and the turning under of green crops, in conjunction with the usual modes of manuring, we have ample means to restore our worn out fields at a cost merely of labour, and which is within the reach of every one. Our peculiar situation as regards our working classes, together with the length of our growing seasons, and the mildness of our winters, are advantages not enjoyed by other portions of the globe. In making our calculations we should ever bear in mind this essential difference, that we have the *labour* and must seek profitable employment for it, whilst elsewhere, the labour has to be procured. The question with us therefore is, how can we best and most advantageously employ the labour we have at command, the expense of which is certain and not to be got rid of; whilst with others it is what will the labor cost, to perform a given portion of work. But the great advantage we possess, we conceive to be in the length of our growing seasons, and the mildness of our winters, for in fact, we can have a green crop on the ground during the whole year, and the field intended to be manured in this way, can have no less than *four* crops turned under, with the loss of but *one* season or marketable crop. We believe but few have taken this into consideration, or estimated its advantages, at least we are not aware of any. We will proceed now to suggest some of the details, and we here beg to be understood as merely offering hints for the consideration of our Planters, (and not laying down rules,) which must be modified or altered as circumstances may be favourable or otherwise.

We will suppose the field about to be resuscitated, to have been much injured by constant cropping, but not entirely worn out, and that it has been in Corn the last season. The Corn may be harvested by the 1st of October. The first operation then should be, to cut down the stalks and level the beds, if it has been cultivated in beds,

though late experiments tend to show that these are not necessary, perhaps injurious (except in low or swampy ground.) Three crops now offer themselves for our consideration, viz: Rye, Barley and the tall growing varieties of what are known as garden Peas. Which of these would prove the best under all circumstances, experiments alone can determine. Peas would be too costly to commence with, except on a very small scale. The better plan we think, would be to obtain in the first instance, a quantity sufficient to sow for seed, and to commence operations with them as soon as sufficient quantities are obtained. Were all things equal, we would prefer commencing the experiment with Peas, because they are less exhausting than Rye or Barley, and deriving most of their nutriment from the air, would yield a greater return to the ground when turned under. If time and other circumstances admitted, we would prefer breaking up the field first, and thus turning under at that time the growth of weeds, grasses, &c., which might cover it,—this ploughing should be rather deep. We would then either sow the Peas broad cast, and plough them lightly under or put them in drills. The latter, for several reasons we would prefer, and one is, that a plough or cultivator might run in, between the rows, should there be time; which extra work would be amply repaid for, by the increased growth of the plants. This crop might be ploughed under in all March, when it would be in the greatest luxuriance, being in full bloom and setting the lower pods. Any of the tall growing varieties might be selected for this purpose, and perhaps the tall marrowfat would be as good as any. From two to three bushels is the quantity required per acre, the latter on very poor ground. When they are planted for the grain, about forty bushels are said to be the average yield. We could not obtain in our climate any thing like that quantity, but this is of little consequence as in this case a luxuriant growth of vines is what we wish to obtain. Another plan which might be adopted, would be to sow a mixed crop of Peas and Rye broadcast. The latter would serve to support the Peas, and by keeping them from the earth, they would grow more luxuriantly and be less liable to accidents from being in constant contact with wet earth, especially if the season prove rainy. If a Rye crop alone be sown, it would be best to put it in, in September or early in October. The growth then would be more luxuriant. It must however be borne in mind, that Southern seed only should be used, experience having proven that, that grown from Northern seed does not produce so vigorous a growth or yield so large a return of seed as that from seed grown in the State. If Rye and Peas be combined, we would recommend the month of November. The best time for sowing Peas is in all the month of December. They will succeed in January, but if delayed longer they will be rather late and might impede future operations, nor will the growth be as luxuriant as those sown in December. If sown in January, especially towards the latter part, they might be united advantageously with Oats, but it would be injudicious to sow Rye with them, if put in later than the middle of December. In fact we would prefer near the sea coast to make use of Oats after the month of December. In the interior Rye or Barley might be still used advantageously. Should circumstances prevent the sowing of any crop prior to February, we would then strongly recommend Oats, sown with a liberal hand, so that there might be a luxuriant growth to turn under at the proper season. If Rye or Barley alone be sown it might be turned under in March or

April. If combined with Peas, in March, April, or May, according to the time sown and season. With Oats in April or May. Oats alone in May and the early part of June. We beg here to be understood as indicating the time when these crops would in all probability be in a fit state for turning under, in the neighbourhood of Charleston and along the coast, as the distance from the sea coast increases (unless in a more southerly latitude) the later would these periods be, but every planter* will easily make the necessary allowances and modify the course so as to suit his plantation and the crops intended to succeed. We must locate our plan somewhere, and those residing in different sections can so modify it as may best suit their several locations, should they deem any thing we may suggest worthy of attention. If this field cannot be spared, it will now be ready for a crop, after having received a good manuring with a green crop, and will certainly repay by its increased product for the extra labor and expence of seed which has been bestowed on it, and this manuring will have cost less than any other that could be bestowed on it, and may be given when none other could be.

But should the field not be wanted for the ensuing crop, it would be best to re-sow it with another crop, to be also turned under in a green state; and the question arises, what grain can be advantageously made use of? In some parts of the State buckwheat might be resorted to; oats would, however, be preferable in the middle sections of our State. On the sea-board they would not succeed so well, and some other crop would have to be substituted. Two crops again offer themselves to our notice. The first is Corn, and all the varieties of millet, (of which there are several grown among us, producing luxuriant foliage); 2nd., Cow-peas. Corn sown broad-cast has been used with considerable effect at the North, and the result as stated through one of the papers, was highly satisfactory. With millet, we are not sufficiently acquainted, to say whether it could be as successfully used. It comes up quite small and weak, and is sometime before it acquires strength enough to make a rapid growth; but after it is once firmly established, this is very luxuriant. The only danger appears to be, that it may be choaked by the weeds which usually spring up at this season. Cow-peas sown at this early season would not produce any grain, but the growth of vines would be very great. Perhaps, a good plan would be to unite these two crops, (Corn and Peas.) But if no crop be sown on the ground, yet will there be a very luxuriant growth of weeds, which being turned under before they seed, would prove of great benefit, improving instead of impoverishing the soil. But whether Corn, Millet, or Peas, be sown, or the ground left to produce a crop of weeds, the whole should be turned under not later than July, and at the same time a crop of Cow-peas be sown over the whole field, which will need no further attention until late in the Fall, when the whole may be turned under. Before this is done, as many of the pods will have ripened, hands should be sent in, and enough gathered to serve for seed the ensuing season.

We have thrown these few hints together, rather in a desultory way, more with a view of calling the attention of our planters to the subject, than of recommending any precise course or rotation. The one, however, which we have brought forward, offers a few advantages, which we shall briefly notice.—If the fields cannot be spared from culture, by sowing them down in the months of October, November, or December, (the earlier the better,) and turning under the growth in a

green state, they will receive a manuring from a crop grown during a time when they would otherwise be idle, and, which could not, perhaps, be manured from other sources. This growth being turned under in March or April, leaves the field ready for any of the crops usually grown among us; but should it be wished still further to enrich the soil, another crop is to succeed the one just referred to. This may, as we have observed, be also turned under in June, and should not be later than the middle of July. Along the sea-board, and all distances not exceeding fifty miles from it, (allowance being made for difference of latitude,) Slip-potatoes, (Potatoes grown from the vines,) may be planted; but should it not be deemed advisable to occupy the field with this crop, Cow-peas may be sown for a crop, and the pods gathered when mature, and if the vines be turned under as soon as destroyed by a frost, and not left to be wasted by the atmosphere, improvement will still ensue, while a crop is secured. Should the whole system be carried out, the field will have received at the end of the year a manuring of three green crops, and a fourth may be put in and turned under in time for the crop of the ensuing season. How far the increased product would warrant this expenditure of seed and labour, we have no data to estimate from. That the fertility of the soil would be greatly increased, there can be no doubt; but after all, its expediency, can only be determined by actual experiments, and we would be glad if some of our planters would give it a trial on a small scale, (although it is rather late to carry it out in full,) and communicate the results of the experiments to us. We have thrown these hints together, as we have already observed, more with a view of calling the attention of our planters to the subject, than of recommending any particular crops, or course; and to bring to their view the advantages which they possess over other sections of country, where if they can get one luxuriant crop turned under, they consider themselves fortunate, and the field well manured.

For the Southern Cabinet.

SOMETHING USEFUL—TO SEPARATE *BURRS* FROM *WOOL*.

Mr. Editor,—The plan I have adopted for two years past, is to gin the Wool on a saw-gin in the same manner as you would Green-seed Cotton. Put in a little *Wool* at first, and keep moving it about with a soft stick, which prevents injury to the saws, and keeps the gin from choaking; after a short time, the Wool will roll, and be ginned like Cotton. The Burrs come out quite free of Wool, and the Wool is better for all purposes for which Wool is used. The gin sustains no injury, and it will gin as many pound of Wool as Cotton in the day.

The plan has been useful to me—it may be so to others. I submit it to your consideration, whether it is worthy a corner of your truly valuable paper.

Yours, respectfully,

C. B.

Montgomery, (Ala.,) Sept. 20, 1840.

P. S.—Our Cotton crops are deplorable; the planters here propose holding a distress-meeting on the subject.

C. B.

MANURING OF COTTON LANDS.

Edisto Island, August 26th, 1840.

To the Editor of the Farmers' Register:

DEAR SIR,—At a late meeting of the "Agricultural Society of St. John's, Colleton," the following Resolution was adopted:

Resolved, That the Corresponding Secretary be directed to address a letter to Mr. Ruffin, Editor of the Farmers' Register, respectfully asking whether, if as the cultivator of Cotton, he uses lime as a manure; whether the beneficial effects are seen the first season; whether slack or mild lime is preferred, and the quantity of each necessary to an acre. Whether used alone, or with compost; and, in fine, that he furnish, if not incompatible with his other duties, all the information in relation to calcareous matter, as a manure for Cotton, which it may be important to communicate."

The attention of the planters of this island, has been called to the consideration of the subject embraced in the above Resolution, from the fact, that whilst they have succeeded, by the liberal use of enriching manures, in maintaining the original strength of their lands, they would appear to have failed in preserving in them that principle which is peculiarly adapted to the production of Cotton, if we are to judge from the diminished results of each year's labors. Prof. Shephard, in his analysis of the soils of this island, is inclined to the opinion, that the "peculiar fertility of the new Sea-island Cotton land may be owing to the proportion of comminuted shells, natural to such soils, and the deterioration of the lands under long cultivation, ascribable to the exhaustion of carbonate of lime." If you can communicate to us any information in relation to this subject, I scarce need assure you that it will be thankfully received.

With sentiments of high respect and esteem,

I remain yours, &c.

J. JENKINS MIKELL,
Corresponding Secretary.

REPLY.

Sir,—In answer to the inquiries which the Agricultural Society of St. John's, Colleton, have recently honored me by making, I can offer almost nothing of such particular facts and accurate results of comparative experiments, in regard to Lime on Cotton, as seem to be called for by the Resolution of the Society. At a former time I cultivated Cotton on a large scale, for so northern a latitude (37 17,) and for five years in succession. Still, the culture, as a field crop, was a novelty in this region, and, to me especially, a matter of experiment, which after sufficient trial, was abandoned by me, as too little suited to our climate, and still less to good and improving farming. Before I began to cultivate Cotton, nearly all my open land had been made calcareous, by marling; and as the best land of the farm was devoted to Cotton, it followed that all of the land cultivated in that crop (varying from 48 to 96 acres yearly,) there was no part which had not been marled. Of course there were no means offered of comparing the results with those of similar land without marl. But I did not deem this deficiency important to myself, inasmuch as I entertained no doubt whatever of the advantage of calcerous manure to the

increase of product of Cotton being as great as to that of other crops, which had been more carefully observed. There was another advantage peculiar to Cotton, which I was as well convinced of my receiving the benefit of, but which also, for the reason above stated, wanted the confirmation of any accurate comparative experiment. This was the general operation of calcareous manures to forward the ripening of all crops; and this effect on Cotton is especially valuable in our climate, though not in your warmer region. In the five years during which I planted Cotton extensively, there was no material diminution of the quantity of any crop, caused by the frost destroying unripe pods; and in only one of the years, according to my present recollection, was there any notable, or noticed portion of the last gathered Cotton, injured in quality by being made yellow by the severity of frost on the green pods; which is a very common evil in the Cotton crops here, on lands not calcareous. As to general product, my richest lot of 25 acres, produced more than 1000 pounds of seed Cotton (short staple, of course,) to the acre. Two acres, separately and accurately measured, produced 1,300 lbs. to the acre. These were the weights as brought from the field, and by weighing the day's work of each hand at night. Of course the subsequent drying would have reduced these weights. The above products were on very good soil, slightly calcareous naturally, and made more so by marling.—On another field, naturally poor and acid, but improved by marling, to the product of 30 bushels of Corn to the acre, the first and best product of Cotton (weighed as gathered,) was bare 600 lbs., and which soon fell to 300 and less to the acre in subsequent cultivations. It may be proper to state that Cotton cultivation was continued on the same land several years in succession, as long as the crop was raised on the farm.

My applications of calcareous manures were confined to shell-marl; consequently, the lime was always in the mild, or carbonated state. Between quick lime and any of the forms of carbonate of lime, my choice would be directed solely by the greater cheapness in application of the one or the other. Deeming, however, that the caustic quality of burnt lime is rarely if ever desirable in the soil, I would prefer such mode of treating quick-lime, whether of shells or stone, as would most facilitate its becoming carbonated, before being applied to the soil, or as soon after, and effectually, as possible. In the admitted absence of any experimental knowledge of my own on this head, and therefore relying on the opinions of others, I would especially recommend to the Cotton Planters of Edisto, the practice of the late Fielding Lewis of Virginia, (which is general on the liming farms of James River,) in regard to shell lime, applied alone, and to the directions of M. Puvis, in his valuable 'Essay on Lime,' for making composts of lime and rich vegetable soil. The first of these articles is in the first volume of *Farmer's Register*, and the translation of M. Puvis' work in the third volume, both of which were formerly furnished to your Society, and I presume remain in its library. Where marsh grass and mud are so extensively used for manure, as on your coast, I should suppose that the making of compost heaps of those alimentary manures with quick-lime, would greatly add to the separate values of all the different materials.

Knowing so little as I do of the soil and agriculture of the sea-islands of S. Carolina, I am well aware that any opinions of mine bearing on their particular qualities or defects, must be of very little worth. But with this

general admission, and notwithstanding my very high opinion of the value of calcareous manures, I must beg leave to dissent from the opinion of Professor Shepard, which you quote. That the natural proportion of comminuted shells in these soils was the source of their original and long enduring fertility, I fully believe; and, as much, that the artificial addition of calcareous matter, where but a trace remains, and still more where no *carbonate of lime* is now found, would be highly advantageous. But the disappearance of the *carbonate of lime* in these soils, (as found by the analysis of Professor Shepard,) does not, in my opinion, indicate the removal of what formerly existed there, at least in any great degree; but rather, by its being acted on by the acid of the soil, its change from the *carbonate* to some other salt of lime. The general reasons for this opinion have been given at length in the chapter on the "Proofs of the existence of acid and neutral soils," in the "Essay on Calcareous Manures." And the new form in which the lime remains, seems to be no less beneficial as a fertilizer, and fixer and retainer of other fertilizing matters; than its original form of carbonate of lime.

It is true that there are two natural modes of operation by which carbonate of lime in soil may be continually abstracted or removed, though in very small amounts. All growing plants take up some lime from the soil in which they stand, and though the quantity is usually very minute, still that small quantity is absolutely necessary to the healthy existence and perfection of every plant. And in this belief, I thence infer, that every soil, capable of producing any vegetable cover, must contain some trace of lime in *some* state of combination, (though almost no natural soils in the Atlantic States contain the smallest portion of the carbonate of lime;) and without some minute portion of lime, every soil would be entirely barren and naked. In short, that it is simply and solely the presence of lime, and the operation of this lime in combining with, and fixing alimentary matters, that serve to form what we term *soil*, which whether rich or poor, is always strongly contrasted with the entirely barren sub-soil below.

But though the crops grown on the soil, and especially when annually and generally carried off, must take away a part of the lime of the soil, the quantity is so small, that a century would scarcely show a sensible diminution. And if a manuring system were kept up, as is the case with your Cotton lands, the probability is, that the vegetable manure applied would contain and restore to the soil fully as much as was taken off in the crops. Indeed, if, as I suppose, the cotton fibre alone be removed from the sea-island fields, there would be very little loss of lime to the land, the fibre being almost entirely composed of carbon.

Another source of loss of carbonate of lime to soil is by its solution in rain-water, and being thus carried away in torrents, or descending to form springs. Carbonate of lime is insoluble in water alone, and therefore would be subject to no such cause of waste. But rain-water has dissolved in it a small proportion of carbonic acid, and so far is made a solvent of carbonate of lime. It is by the percolation of rain-water that all limestone waters are formed; and as soon as they lose their excess of carbonic acid, (which is very easily effected,) the carbonate of lime held in solution is dropped. It is by this process, slow and small in each particular effect as it is, that the solid limestone foundations of mountainous regions are hollowed out into immense caverns, and that all the streams are saturated with dissolved carbonate of lime. And the waste

and removal of this substance (which goes to fertilize other lands) must be enormous, where there exists so much carbonate of lime, in excess beyond all the wants of the soil and its vegetable products. But where there is no such excess, I believe that the attraction of the soil for the lime is stronger than the solvent power of rain water, and that none is so lost, unless the soil in a mass, be washed away. And with so level a surface, and sandy and open soil and sub-soil, as the sea-islands have, if there could be any carbonate of lime so dissolved, it could not flow off in the water, but would merely sink into the sand, and thus serve to deepen the fertile portion of the soil.

Feeling a strong and general interest in the Agricultural improvement of South Carolina, and especially by the means of the calcareous manures with which the country has been so bountifully supplied by nature, and which are as yet almost entirely overlooked and neglected, I should rejoice to aid the excellent objects of your Society to promote that best of all possible modes of fertilization. It is therefore the more regretted by me, that, in regard to all the information on particular points required of me, my reply should be necessarily of so little worth. On the subject generally, perhaps my opinions might be of more value. I therefore beg leave to present twenty copies of my general work on this subject, the 'Essay on Calcareous Manures,' through you to the Agricultural Society of St. John's, Colleton; and earnestly hope that this and all other existing sources of information, on that important subject, may be permitted to operate fully for the improvement and profit of South Carolina.

Respectfully,

EDMUND RUFFIN.

To J. JENKINS MIKELL, Esq., Cor. Sec'y. Agr. Soc. of St. John's,
Colleton, S. C.

GEOLOGICAL SURVEY.

BY THE EDITOR.

THE subject of a Geological Survey of the State is, for a third time, and by a third Governor, urged upon the attention of our Legislature. The Committees of two Assemblies, to whom the Survey was referred, were unanimous in recommending the work. In one instance, a bill for making an appropriation, passed the House, but in the hurry of adjournment was not acted upon by the Senate; while in the other case, the Senate approved, but the House failed to concur. We confidently look, the present year, for a more unanimous and propitious consideration of an enterprize, in which, as agriculturists, we have the deepest interest.

Already, twenty public Surveys in the United States, have either been made, or are in active progress; and in no case, so far as we know, have they failed to realise the anticipations previously formed of their utility. In some instances, vast tracts of country which had been abandoned as valueless to Agriculture, have from the discovery of sub-jacent or contiguous deposits of mineral manure, become suddenly

converted into the most fertile districts, while a general spirit of inquiry, and an enthusiasm for improvement, has been infused into the minds of cultivators of the soil every where, which promises the most auspicious results.

Undertakings of this nature are important in other respects to planters. The agriculturist often stands in need of a knowledge of the nature and arrangement of the strata that underlie his estate, in order to guide him in the construction of drains, the boring for springs of wholesome water, the discovery of clays for bricks, and of lime-rocks for cements. Excellent building-stone also, is often overlooked by farmers, who either incur a useless expense in deriving it from a distance, or substitute for it the perishable material of wood, in the construction of their dwellings and rural accommodations.

But in a country so rich in geological formations, it cannot admit of a doubt, that valuable metallic deposits exist. Indeed, we have the fullest assurance of the prevalence of rich iron ores in several districts of South-Carolina. The gold formation traverses the State also, and when properly explored may afford profitable mines of this precious metal; while there is every thing to encourage the search for copper, tin, cobalt and manganese. The discovery of one good mining district, like that of Cornwall for instance, would realise more to Carolina than her entire Cotton culture, important as that staple is to her prosperity. But without anticipating a mining field so extensive as that of Cornwall, suppose a single metallic repository like that of the Anglesey copper mine, (whose discovery was comparatively a very recent event,) should result from the Survey, the reimbursement for its trifling cost, would, a thousand fold, be experienced during the first ten years of the working of such a mine. Beside which, it should be recollected, that the working of mines in a country reacts most favorably upon the agricultural interest by creating a demand for produce, by promoting a free circulation of capital and keeping up rail-roads, which if left to depend on the transportation of agricultural products and passengers in sparsely inhabited districts, must ever languish, if not ultimately fail.

As a conductor of an agricultural journal, it does not come within our province to prescribe the mode of managing the proposed work. We hope, however, that as the Survey has been delayed until so late a period, (most of the other States having already effected the discovery of much of their mineral wealth, and in some instances drawn to its development large amounts of foreign capital,) that no more time will be lost before entering, in good earnest, upon the enterprise. In the States of Pennsylvania, New-York, and Massachusetts, several surveyors have been in the field at the same time, whose researches have been directed to distinct objects. To one individual, for instance, has been allotted the scientific geology, to another mineralogy, and to a third agriculture; while in New-York, distinct professors of zoology and botany have been superadded. In such cases, where a large corps of engineers has been employed, it is intended to pursue the investigations with the utmost precision and detail; and a number of years has been allowed for the completion of the work, the surveyors in the mean time being only required to give brief annual reports of their progress. The majority of the States, however, have decided upon a less expensive and more expeditious mode of procedure, and have looked forward to the employment of but two or three professors for a period of about three years. Pro-

vided the Legislature should adopt the latter plan, as it is most probable they will, in case they authorise a survey, it seems to us that the following would be a suitable division of the labor : viz. to confide to a *Geologist* the business of ascertaining the different formations, and the mapping down of their respective areas, to a *Mineralogist* and Chemist the determination of minerals and mines with the analysis of ores, marls, soils, and mineral waters, and finally to an *Agriculturist* the subject of mineral amendments, the adaptation of soils to particular crops, and the introduction of improvements generally into agriculture.

We would recommend also, in furtherance of the object, that a suitable apartment in the Capitol be devoted to the arrangement and exhibition of the illustrative specimens of rocks, ores, minerals, marls and soils, as well as drawings of geological sections, models of farming utensils, specimens of grains and grasses, and plans of buildings suited to a plantation.

No fears can reasonably be entertained, that competent persons can be found, to whom to intrust such a work, or that they would fail to experience the hearty support and good wishes of the people, among whom they would be called to make their useful researches. In conclusion, we cannot refrain from transferring to our pages the very judicious remarks of our Chief Magistrate, as contained in his Message to the General Assembly :

"Permit me to direct your attention to the importance of a Geological and agricultural Survey of the State. This matter was brought to the notice of the last Legislature, by Governor Noble and the State Agricultural Society. I trust it will receive your most serious consideration, as no measure upon which you will be called to act, involves, in a higher degree, the general interest. South Carolina should not be backward in promoting the cause of science, by following the example of many States of our Union, as well as other parts of the world.

"Apart from the immediate or more remote advantages which are likely to accrue to her from the accomplishment of this object, her reputation, as a liberal and enlightened Government, requires her to respond to the claim which the rest of the civilized world exerts upon her, to contribute her proportion to the mass of information already accumulated.—From similar considerations, States poorer in resources, more limited in population, and whose citizens are engaged in employments less likely to be directly beneficial by the development of their physical resources, have liberally undertaken and accomplished such projects. But South Carolina is an agricultural State, and it is a lamentable fact, that from the want of correct information, and from the natural desires for the greatest immediate profit, without reference to future advantages, a large portion of her soil has been exhausted of its fertility, and thrown out of cultivation. A knowledge of the geological structure of our State, is the first and most essential instrument to arrest this devastation. By indicating the position of those calcareous and argillaceous deposits, which are known to be widely distributed throughout our borders: by teaching the modes of recognising, distinguishing, and applying them, in the varying circumstances to which they are adapted, means will be presented of reclaiming thousands of acres of exhausted land, which are now a reproach to our knowledge and enterprise.

"The exploration of Metallic Ores, is a matter of great importance. Two of these, Iron and Gold, have received some attention. The ores of Iron are widely distributed throughout our State, and many of extreme value have been entirely neglected, in consequence of an ignorance of the deposits of those other mineral substances, often to be found in their immediate vicinity, which are essential to their profitable working. Gold has been worked out to an inconsiderable extent, and to small profit. The development of the localities of Iron, and its proper fluxes, in the vicinity of the Gold region, is very likely to

give an impetus to the production of the latter metal, by causing the introduction of the Russian process of obtaining it, by smelting the ores in combination, and subsequently separating them, and thus give a new and extensive direction for the profitable employment of capital and labor.

"The great variety of our geological formation, from the oldest or primitive, to the most recent or tertiary, affords reasonable prospect of yielding, by minute scientific examination, other metallic or mineral treasures. Among these may be enumerated Marble, and materials for building, Coal, or Peat, &c., which apart from their immediate value, are well worthy of attention, from the new channels of enterprise which they will lay open."

The following directions for the raising of the Sugar Beet, are from the pen of a distinguished citizen of New Jersey. They were contained in a private letter to a gentleman of this city, and not intended for publication. At our solicitation however, he has consented to their appearance on the pages of this Journal. [ED. SO. CABINET.]

For the Southern Cabinet.

PRACTICAL DIRECTIONS FOR RAISING SUGAR BEETS.

1. The soil ought to be rich and friable, so as to break up fine without heavy lumps or unbroken clods.

2. It may be moderately moist, but not very wet or sodden with water.

3. The ground ought to be ploughed and harrowed three times; once early and deep; a second time 10 or 12 days after the first, to turn under the seedling weeds and extinguish them; third and last time less deep than the first; and about a week after the second. When the third ploughing gets harrowed down smooth the seed-beds should be prepared immediately, in order to prevent weed-seeds from getting the start of the beet-seeds.

4. The seed-bed is made by turning two furrows together, but so that the bed is elevated three or four inches above the bottom of the furrow or ditch on each side of it, and not more. The next bed should be so formed as to leave an interval between them from $2\frac{1}{2}$ to 3 feet wide, that when the crop comes to be dressed by the plough it may admit of two furrows.

5. On the top of each bed, plant a single line or row of beet-seed, at the distance of one foot from seed to seed, to be ascertained by a small hand stick, just a foot long, which the planter keeps in his fingers. Pull a little dirt on the seed with the finger, or set the foot on it. The process of planting is apparently slow, but a boy soon becomes expert. There will be a greater weight of beets at a foot distance than at any less.

6. Put two seeds *at least* in a place, in order to ensure one plant; but if they both should fail to come up, one may be transplanted at the first or second dressing from a redundant hill, and it will be sure to grow though it rarely becomes of an average size.

7. As soon as the plants have all come up and get a leaf the size of a

five cent piece, extract with the fingers from each hill all but the two strongest plants, and destroy with a hoe all the weeds around them and on the top of the bed up to the next one. This must be done with the fingers and hoe. The plough is not admissable. One hand will dress half an acre easily in three days. This and planting them is the principal labor. At the second dressing reduce them to only one plant.

8. Four or five days after the first dressing, the weeds in the intervals may be cut up by the plough, which is to be immediately followed by a hoe, to uncover such as happen to get buried, and give a clean circle round each plant. This hoeing is done with great expedition.

9. The ploughing and hoeing must be repeated from once to twice or three times more at short intervals, subduing while they are young, all weeds, until the tops of the beets smother them from growing. The crop must be kept very clean, but is done with very small labor after the first dressing.

10. For two years successively, *half* an acre has yielded 500 bushels of beets without the tops, each year; last season the quantity exceeded that by five bushels, and fell short of it about as much this year. They weigh 65 pounds to a bushel, or fifteen tons to an acre.

11. Horses have no taste for beets, while cattle and hogs devour them greedily, and the tops as freely as the roots. Cattle cannot eat them without a reduction of size by slitting them *length* wise into four or five slips.

12. They are so rich that a peck of slit beets is one full feed, and given morning and night to a cow, with the ordinary allowance of hay, has not only enriched the quality of her milk, but actually doubled the quantity of it in ten days, put her in excellent flesh, and given a lively coat of glossy hair. More will scour them.

13. The seed was planted the 15th day of May, which in our climate is fifteen days before the first ripening of straw-berries, and fifteen days before the first ripening of them in Carolina would be the best rule probably for that climate. The seeds are soaked about an hour before being planted, in tepid water, and then rolled in ashes or plaster, to dry them. It gives them a small start of the weeds.

GARDENING.

Is your garden too clayey? Cart on sand, spread it over the surface and mix it with the soil by ploughing, digging, hoeing, raking, &c. Is it too sandy? Spread over it a moderate dressing of stiffer soil or clay loam. Sand for clay or clay for sand, is worth more as a manure than any heap from the stable, as this is more permanent. A soil that is very stiff will require large quantities of sand to reduce it—more than many people would suppose—for, less than enough to *overcome* the adhesiveness of the clay, will only make the soil harder, just as sand and clay will make a hard cement for mason's use. But a little clay will answer for sandy soils.

Some complain that open, free or porous soils lose manure by leach-

ing down. This is a mistake.—They lose it, rather, by evaporation, which goes on most rapidly in porous land. A dressing of clay on the surface of such soil closes the pores, and obstructs evaporation, whereby the strength of the manure is retained. We had rather have a sandy soil with the top stiffened by clay; than to have a clay pan at the bottom which will prevent roots descending low in pursuit of moisture in a dry time. We do not believe that manure ever goes *down* so low as to be lost; we dare say the roots of plants will have instinct and perseverance enough to find its hiding place. If manure leaches down, why is it that you can never detect it lower than a few inches under ground? Why, in digging cellars and wells we do not sometimes come across large deposits of hidden manure? The truth is nature designed them for the surface, and the circulations of the earth tend to bring them up so as to constitute a soil. That soil which is stiff on the surface will longest retain their strength.

Never set currant, gooseberry or other bushes on the border of a garden. They will invite the grass about their roots and form a capital stock of weeds that will always be making encroachments upon the interior land. When grass roots—especially witch grass roots, are once well mingled with the roots of bushes, you can never expel them from this hold, or from the garden. Besides, fruit grown under a fence is more or less shaded, and is not so sweet as that ripened in a more sunny situation.—Set your bushes out at very considerable distances, in rows within the garden, so that from their infancy you can hoe about and weed them as well as you can a hill of corn. This will exclude grass and weeds, and make the bushes grow better, besides giving you better fruit. A dressing of rotted manure every other year will be serviceable to them.

Prune currant and gooseberry bushes early every spring, by cutting out superabundant shoots, old and decaying limbs, &c. This will let the sun and air circulate freely amongst them. The shoots of last year's growth which you cut out, are just the things to get new bushes from. Insert them in the ground which is made loose by digging, and they will shortly put out roots and grow. This is the best way to procure bushes, as you then have young and vigorous ones, which will bear fruit many years longer than those you pull up from old bushes. We had rather have a dozen young currant bushes two years old, produced in this way, and to pay nine-pence a piece for them, than to have some generous neighbor give us two dozen old bushes which he would like to get rid of because they have seen their best days.

You cannot prune currant and gooseberry bushes to standards. Nature never intended them for *trees*, and it is seldom safe to violate her intentions. She designed them for *bushes*, and bushes it is best to allow them to be; but prune them so as not to allow the limbs to interfere much with each other, and so as to exclude the decayed and diseased limbs.

About as pretty a fruit as families hereabouts can cultivate in their gardens, is the black raspberry or thimble berry. The bushes grow wild in most of our towns, and therefore the original roots can easily be obtained; but they never produce so abundantly nor so sweet fruit in a wild state, as when cultivated in gardens. They are hardy, will withstand any winter, are great, very great bearers, nothing injures them, and the fruit is delicious eaten fresh from the bush, or set upon the tea table

with a little sugar and cream mixed with it. The berries too make excellent pies, preserves, &c. On the whole they are a most agreeable and valuable fruit to cultivate. They make an elegant appearance growing, and a dozen bushes will supply an ordinary sized family with an abundance of the fruit for use in the season of them, besides enough for the best of preserves.

As to apple, pear, cherry, plumb and other trees, there ought to be but few of them in the garden. They shade the ground and spoil it for the purpose of cultivation. Moreover, if the soil is as rich as it *should* be for a garden, it is *too* rich for such trees. It will stimulate them to an excessive and unhealthy growth, and induce by their very exuberance, all sorts of insects that injure the trees and spoil the fruit. If you have land to raise such trees, set it apart especially for this purpose, and do not enrich it much. There may, however, be a few such trees placed to advantage in the yards about the house. We had rather see a genteel front yard ornamented with a few good pearmain or early harvest apples, seckle pears, green gage plums, and ox heart or mazard cherries, than with horse chesnuts, acacias, mountain ashes, or fir trees, which are of no use.

With regard to the *cultivation* of vegetables in the garden,—our article is already too long to allow us to be very particular in our suggestions on this head. Suffice it to say, you must bring your soil to the proper consistency, if it be not so already, by the admixture of clay with sand, or sand with clay. Then manure it well with old dung. Let it be *faithfully* spaded. Make your beds and plant you seeds with the exactness of an ingenious mechanic's best rules. Too many paths sacrifice the land, and too few will oblige you to tread on the beds more than you ought. Just enough for convenience is the thing. And what will you plant? You will want some peas. Sow them on the *poorest* land. If the soil is very rich, it will make them run to haulm rather than to the production of fruit. To insure a succession, plant peas at about a fortnight's interval, till the first of June.* Those planted late, will be too likely to mould. You will want some green corn. For very early sorts plant the Canada or Dutton corn. For late, plant the sweet and Tuscarora. Squashes—you will want both the summer and winter varieties. For the first, plant the scallop squash in hills. For the latter, the tea kettle, marrow and Canada crook neck are the best. But be careful to plant the winter squashes far enough apart. Let not over two healthy plants stand in a hill, and let the hills be at least eight feet distance from each other. A dozen such hills is enough.

The best *pole* beans are the horticultural. Seiva and Cranberry are good; but the former are late and the latter are liable to rust. The best bush beans are the yellow bush cranberry—no mistake. There are other good sorts. If you wish for beets, as you do, be sure and procure the real *blood* beet seed.—Get these from a seed store. Those raised in the country, nine times out of ten, are degenerate, and will prove stringy. The Altringham carrot is the best for cows; the orange for the table.—Select the Dutch parsnip for that vegetable. You will want early and late cucumbers. The short prickly plant for the first, and at the same time plant the long green turkey for later use and for pickles. The thumb and finger applied every morning by sun-rise, is the best medi-

* March is as late as they can be planted with us.

cine to *kill* the bugs. A few days application of this remedy will secure you. But it is best to plant the seeds thick so as to save at least a few of the unharmed plants in the hill. A row of teakettle squash seed, sowed *around* the cucumber hill will entice the yellow bugs from the cucumbers and melons, and by the time they have destroyed them, the latter will be out of danger. None of those however, should be allowed to grow ultimately. All the gourd family will mix strangely.

You will want some peppers. Sow the "bell" variety. They are the strongest and the skins are thickest. A little sweet marjoram, sage, summer savory and other sweet herbs will come in place next winter—especially if you or yours are sick, as all are liable to be. By the way, the herb bed should be an important department in every garden, Rhubarb, Wormwood, Thyme, Peppermint, Catmint, Hoar-hound, &c. are very valuable as medicines. A good housekeeper will be sure to raise all these against time of need, and not depend, when occasion calls for them, upon his more thoughtful and provident neighbors. A man who will not prepare for sickness, deserves to suffer some, for the want of proper remedies when disease befalls him.

A good garden is a profitable concern to every family. It affords a material part of a family's subsistence, and the convenience of it is very great. By raising your own vegetables you save many dollars, besides enjoying fresher and better articles than those you would purchase. The order and neatness of a garden is a pretty good index of a man's mind. You may be sure that a man who cultivates a garden well, is a person in whose judgment and good principles you may safely rely.

SCALDING SEEDS BEFORE PLANTING.

Since last month we have made several experiments on scalding Seeds with very different results, some favorable and some unfavorable. From these it would appear that such as germinate readily, are most impatient of heat; and were it not so, but little advantage could be gained by this treatment. Our investigations hereafter, will therefore be confined to such as require a longer time to come up, or grow with more uncertainty.

On melon seeds, our experiments were unsatisfactory, though some bore it well. Scalded seeds of the giant rhubarb, came up three or four days sooner than the unscalded, and in greater numbers. To sweet corn, the scalding was destructive. On the early yellow corn, it was not favorable, though a part is growing. The most flinty grains, we suppose will bear it best; and though we have often seen corn scalded to advantage in a warmer climate, we cannot recommend the practice in this District.

An earthen vessel containing about two quarts, was filled with seeds of mangel wurtzel and boiling water. These have come up beautifully—better than we have ever seen them do before. Carrot seeds were damaged by the operation.

The seeds of leguminous plants often germinate very slowly. Those of the Scotch broom, and yellow Colutea, will sometimes lie in the

ground for years before they grow; and there is reason to believe that those of the common locust will lie dormant for ages. Burning the surface of the soil often gives them a start, and we should not think of planting them without scalding.

Some seeds that cannot bear scalding however, may be benefitted by soaking at a lower temperature—blood heat for instance; and it has been mentioned that carrots may be sprouted in this way to advantage. But some seeds will not even bear soaking. Of this kind are the red and purple Clary (a species of the sage,) which soon become enveloped in mucilage. In this condition, we have never known them to grow.

CANKER WORM.

Mr. Editor,—The increasing ravages of this pest of our orchards, the present year, and its rapid approach to many of us who have not yet been overrun by it, have excited a good deal of solicitude among cultivators that an effort should be made to arrest its progress; and I was glad to see in the valuable communication of J. W., copied into your paper the past week, from the Boston Courier, the desire of the writer, "that a course of experiments through the whole progress and transmutations of this destroyer during the year" should be made. To aid this desirable object, I have thought it might be useful to those engaged in this pursuit, to be made acquainted with the latest method adopted in Europe for the same purpose, and which I presume is not generally known here.

In a late work on "*Insects Injurious to Gardeners and Farmers*," by VINCENT KOLLAR, Curator to the Royal Cabinet of Natural History at Vienna, and translated during the present year, by the Messrs. Loudon of England, I find an account of the *Winter Moth* and its ravages, which I presume, from the description, as well as from the plates accompanying the work, there can be no doubt, is identical with the canker worm moth of this country.

After treating of the habits and ravages of this insect, and the natural causes of its diminution, which are often so effectual that fruit trees remain uninjured by it for several years, the author says:

"The means of diminishing this insect, existing in nature, are, however, not equally effective every year: so that sometimes the numbers of the caterpillar increase to such a degree that the produce and vigor of our fruit trees would be alike destroyed if we did not take measures against them. We can, at least, prevent the females of the winter moth from reaching the top of the tree and laying their eggs there. We know that they have no wings, and consequently can only crawl up the trees; therefore, if we can place any contrivance round the trunk of a tree, over which they cannot pass, that tree is secure from them. No eggs can be laid there, and consequently no caterpillars will be found there in spring.—Everything has been tried to keep off the female winter-moths from the fruit-trees: the stems have been surrounded with tow, cotton, fir-twigs, ears of corn, and substances having a disagreeable smell; but they have passed all these barriers and reached the tops. They have been even known to pass worsted threads prepared with

mercurial ointment and wound round the trees, as many amateurs of gardens have experienced. The stem of the fruit-tree has also been surrounded with strong paper, fastened with pack-thread, and smeared with tar, or cart-grease. This was so far effectual that the moth stuck in the tar. But as this substance either loses its stickiness by the rain, or dries quickly up, the smearing must be repeated daily to render it effectual; and this would be both tedious and expensive. If the tar be too thickly laid on, it flows from the paper on to the stem and injures the bark. Therefore, those persons give us very bad advice who say that the stem itself of the tree ought to be smeared with tar, to prevent insects from reaching the top. The tar even penetrates through the bark into the wood, and destroys the sap vessels, by which young trees are greatly injured. At last a plan was thought of, of surrounding the base of the stem with a wooden frame, or box, and daubing it on the outside with tar to avoid the bad effects mentioned above. This contrivance completely answers the end in view, as has been fully proved. The frame consists of four boards about a foot high, and rather longer than the diameter of the tree they are to surround. These four boards are to be nailed together in the form of a square open box; but the fourth board is not to be fastened on till the frame is placed round a tree, as the stem must be entirely enclosed by the boards. To prevent the sun or rain from having any effect on the tar or cart-grease, the top of the frame is to be surrounded with a moulding; that is, a thin piece of wood three or four inches broad is to be nailed on the top, so as to form a projection on the outside, and under this an angle. This angle, formed on the outside only, is to be thickly smeared with tar. This frame may thus be called a boot, as the stem of the fruit-tree stands as if in a boot. It must be set an inch deep in the earth, which must be well trodden in around it, so that the moths may not get under it and reach the tree.—I must here observe that the boot ought not to be made too large; but should be so fixed as to allow of but little space between it and the stem; that we may be the more certain that no pupæ of the winter-moth lie within the boot. But this is not much to be apprehended; for I have known of only two instances of the winter-moth coming out of the earth within the boot, and consequently very near the trunk.

“At the end of October, it is time to bring this wooden boot into use, to guard the stem; and, consequently, the tops of the fruit-trees from the female moth. It must be smeared, as we have before said, in the angle under the coping with tar. If it is new, it must be smeared two or three days in succession, as at first the tar penetrates greatly into the wood, and soon dries. Afterwards, smearing is only necessary two or three times during autumn; and if the ground becomes frozen or covered with snow, it may be left off entirely. In spring, when the earth is thawed, the boot must again be daubed with tar, as some of the moths still come out of the earth, and once more in the beginning of May, in order that neither looper nor other caterpillars may come from other quarters, and reach the top of the tree; for the larvæ are as incapable of passing the tar as the wingless moths.

“A boot of this sort is not very expensive, as it is not necessary to have the boards planed, and if not removed from the tree it lasts several years; so that the expense for one tree amounts at most to about a penny a year. If the tar is reckoned at another penny, the whole preservative throughout the year costs only two pence for each tree.

This trifling expense should not be grudged when we consider the damage which the green caterpillar does to fruit trees. Besides, by this contrivance, the orchard is protected for several years from these destructive caterpillars; for if they are once nearly extirpated, it is a long time before they again increase so much as to be very injurious."

The apparent advantages of the *boot* are,

- 1 That the tar may be used without coming in contact with the tree.
- 2 The projecting moulding round the box obstructs the influence of the sun and the rain upon the tar, and consequently, it is kept much longer in an emollient state, so that its application three times in the autumn, and twice in the spring, is said to be sufficient.
3. The economy of the remedy, costing in Germany but *two pence* (four cents) per tree. In this country it would doubtless cost something more.
4. It is within the means of every one to apply it, it being only necessary to be provided with a small quantity of cheap lumber, and should the leisure time to be found in the winter season be employed to construct the boxes, they would cost but little.

In this country, the application, to be entirely effectual, should be made by first of October, as the insects sometimes ascend the trees during that month, consequently it would be improper to defer it, as directed by Kollar, to a later period.

ELIJAH VOSE.

Dorchester, June 15, 1840.

[*New-England Farmer.*]

DWARF FRUIT TREES.

In some places, especially in France, a method prevails of cultivating dwarf fruit-trees. These are said by English and French writers to have many advantages. The trees are not as much exposed to high winds, they produce better fruit, bear earlier, and more abundantly.

Dwarf trees are produced by inoculating on stocks of comparatively slow growth. Thus by inoculating the apple on the *Paradise* or *Doucin* stock, the peach on a slow growing plum stock, and the pear on the quince, &c. This is practised here, more particularly, in gardens, where the trees are set along the borders, alternating with goose-berries or currant-bushes.

The pruning and management of dwarf apple and pear trees, are well described in the following remarks:

The first subjects of the following remarks, from their appearance, were planted six or seven years previously to the commencement of any pruning being given them. In consequence they required to be very much thinned out, so as to get the branches clear of each other. For thinning I always bore in mind to cut off the old wood close to the stem or branch it was attached to; this prevented young wood springing afterwards. When the trees were thinned of the old shoots, as above stated, the young side shoots were what is generally termed, spurred in; that is, they were so shortened that only two or three buds were left on them, and the leading top shoots were shortened to half their length.

The following and every succeeding year the trees were treated in the same manner, as respects the young wood, till they had acquired the desired height, when the leading shoots were shortened, as the side shoots or spurs had been previously. When the leading shoots show a disposition to grow very luxuriantly, which is apt to be the case under this treatment, they should be prevented doing so, by cutting off part the old wood along with the old shoots immediately above a flower bud. This will prevent the shoot so cut from increasing in length. The spurs must be treated in a similar manner, by cutting off a small portion of the old wood along with the young, when they are getting too long.

I have never found the above treatment prevent the fruit swelling, or in any way detrimental to it; but on the contrary, it was always improved.

Young trees are to be treated in the following manner: if there are more than three shoots on the plant, reduce them to the number, and shorten them to three, four and six eyes, according to their strength. The following season reduce the number of leading shoots to six, and shorten them to three-fourths of their length, and spur in the remaining shoots. The tree should be managed in every respect in this manner until it has attained the required size, which of course depends on the convenience or fancy of the owner, or conductor of the garden.

I make a point of letting the trees take their natural form of growth as far as the system described will permit; for I consider it of little consequence what shape is given to the tree, provided my end is attained; that is, to make every branch as it were a long spur, with bearing buds from the base to the extremity.

Two or three years trial of this method only, might possibly deter many from a continuance of it, in consequence of the quantity of young wood which will be produced yearly at first, and from the apparent difficulty of getting rid of the superfluity. But that inconvenience will be ultimately surmounted if the foregoing instructions are attended to, and the continuance will be the possession of both healthful and fruitful trees. To attempt to bring old trees into this method of management would be attended with difficulty, unless they were cut down short and allowed to make new heads, which I should recommend where their produce can be spared for a time. In a few years fine healthy heads would be formed, which will yield fruit superior to any that could be expected from them if left in their rude state. But if the trees cannot be spared to be headed down, they may be very much improved by thinning out the spray, and cutting out a few old branches, which will cause them to throw out young shoots, and these in a short time will become bearing wood. The remainder of the old branches may be thinned out with effect.— Even if this process is performed only once in two or three years and the stem and branches well cleared of moss and dead bark, it will be of great service to the trees, and be a means of keeping them free from insects, and giving them a neat and clean appearance.

[*Practical Farmer.*]

SURPRISING EFFECTS OF CAMPHOR ON VEGETABLES.

THE stimulant effects of camphor upon the human and some other animal bodies are well known; but those on vegetables are not only new, but astonishing in their nature. A piece of the woody stem of the tulip-tree, with one flower and two leaves, taken out of a pot of water, containing several other flowers of the same plant, all, to appearance, in the same state, was placed in eight ounces of water, which had been stirred up for some time with one scruple of good camphor. In a little while, an unusually lively appearance became remarkable in the flower in the camphor; while the others, though they had the benefit of a larger quantity of water, were sensibly drooping.

The two leaves first elevated themselves considerably on their footstalks; the flower expanded more than in a natural state; the stamens receded from the pistillum: and the three leaves of the calix, or flower-cup, were remarkably reflected back, and grew extremely rigid and elastic. The internal surface of the petals of the flower perspired considerably, though a similar perspiration could not be perceived in the flowers of the same plant, in the same room and temperature. The camphorated plant continued in a very invigorated state for two whole days, after which it began to droop; but the leaves drooped and decayed sooner than the flower. The other flowers and leaves of the tulip-tree left in simple water, did not live more than half as long as that in the water impregnated with camphor.

Notwithstanding these surprising effects, no odor of camphor could be traced in any part of the branch, except what was emersed in the fluid.* This circumstance seems to render it probable that the camphor was not absorbed by the plant, but that it exerted its remarkable influence entirely through the solids to which it was immediately applied. The appearance, however, was very striking, and might be compared to the beneficial effects of opium on the human constitution. Several other experiments were made with camphor on plants, in all of which it was very evident that camphor operated as a powerful and wholesome stimulant.

A stalk of yellow iris, with one expanded flower, was taken out of a phial of water in which it had been placed more than a day. The flower had begun to droop; but, in a very few minutes after being put in a phial of the same size, containing a few grains of camphor, it began to revive, and continued in a vigorous state for many hours. As camphor is but very sparingly soluble in water, it is natural to conclude that the stimulant effects were produced by a very small part of the quantity mingled with the water. This discovery might induce us to make experiments with camphor as a manure, if the expense of trying them on a scale sufficiently large were not excessive. But still, we may apply the camphor in the manner before mentioned; and can that be termed a useless purpose? A few grains of camphor, acting as a cordial, will revive a drooping plant, increase its beauty and prolong its existence. In the eye of the florist, these are objects of no mean importance.

[*Burt's Observations on the Curiosities of Nature.*]

* In some experiments made by us on the rose, the flower became so strongly impregnated with the Camphor, as to destroy nearly altogether its natural odor.

For the Southern Cabinet.

CORRECTIONS RELATIVE TO THE AGRICULTURAL SURVEY OF SOCIETY HILL,

BY COL. J. N. WILLIAMS.

Mr. Editor :—I notice a few mistakes in your Agricultural Survey of this part of the country. Such as my plantation being entirely under-drained—it is only so in the wet low place, near the open drains. I do not think it would answer, to have no other kind of drains in our country, only grass land I should think, could stand such sheets of water as we have sweeping over our lands—washing away their fertility when fresh ploughed, as must our crops be, every 10 or 12 days. My main drains, if you recollect, are 10 feet wide, into which other large drains enter from different parts of the plantation. When a low wet place occurs near these, in many places I have under-drains, and approve of them highly so far, but have not had experience enough to say whether they will last long enough to prove best in the end. Another error I observed is, that I never burn any thing when clearing my land. You should have said cleaning up. In clearing land I cut nothing standing that the negroes would prefer to girdle—every thing is then burnt. After this, every year as the trees die; limbs sap and trees fall and cause much litter on the ground every Spring to dispose of in some way that the ploughs can run. It is this rubbish that you saw piled up in my field, and that I have for two years been perseveringly moving every Spring. It is only a speculation of mine what I shall do with the heart of the logs after the sap is all off by frequent moving, &c. Whether then I had not better bury than burn them, I have as yet not tried the experiment. I also claim to put a cart load of manure every 50 feet instead of yards.—These were errors I suppose committed from the manner of writing out your day's observation at night, when much fatigued, &c., and not observed in reading over afterwards.

Yours, truly,

JOHN N. WILLIAMS.

NOTE.—We are glad that Col. Williams has corrected the errors into which we have fallen. It is impossible that we can give accounts accurate in every respect, owing to various causes, which the reader can readily conceive. All that we can do is to report faithfully all we see and hear, and when we fall into errors either from inadvertency, or misunderstanding the parties giving the information, or from not having sufficiently investigated the subject, we hope our friends will not hesitate *immediately* to correct them. In fact we shall always consider it a favour done us, for our sole desire is to convey correct information even on the most trifling points.

[ED. SO. CAB.]

TALES, SKETCHES, &C.

SCENES FROM THE DRAMA OF HISTORY.

SCENE III.—THE PEACE OF ROSCHILD.

[CONCLUDED FROM PAGE 636.]

THE terms of peace had been arranged—*væ victis!* Denmark was to yield many a fair province and rich seigniorship to swell the power of Sweden. The formality of signing a treaty alone remained, and all parties were now assembled at the Hotel de Ville of the small town of Roschild to go through the final ceremony. The Danish negotiators were Gersdorff, Reëtz, and Skeel, together with Sir Philip Meadowe, as the representative of England; and on the part of the Swedes, the Chevalier Terlon, as envoy of Louis XIV., accompanied Bielk, the Swedish senator, and the traitorous Count Uhlfeldt. The latter was restored by the treaty to his rank and estates in Denmark, and there he stood, exulting in the full gratification of his vindictive pride, reckless of the ruin of his country.

As the aged senator Bielk read over each separate clause, the Count added some insolent triumphing expression, which rendered still more humiliating the painful task of the Danish commissioners; and when Bielk, after signing, handed him the parchment.—“Well,” he exclaimed, “who would have thought that Charles Gustavus X. would choose the pen to decide his quarrel? Had my advice been followed, the capital had been stormed by this time, and there is no treaty-maker like the sword. However, there is my signature,” writing in a bold, uneven hand the name of “Corfitz Uhlfeldt.” Then followed the signatures of Terlon, Meadowe, the senator Christian Skeel, and the Chancellor Reëtz; and last of all the fatal instrument was passed to Gersdorff, the grand master. As he took the pen, his lips quivered, and he was very grave; yet the name of “Joachim Gersdorff” is plainly and steadily written, nor did any one overhear his indignant whisper to Sir Philip Meadowe—“*Utinam me nescire literas.*”

The war was at an end; yet once more was heard the sound of the trumpet, when the two kings met at Fredericksburg in commemoration of the peace. A league from the palace, Charles was met by Frederick on horseback. Each dismounted, and embraced his rival, and their followers, mingling together, formed but one escort to the two princes. Within the palace hall the Queen of Denmark, attended by her fairest ladies, received the Swedish monarch with royal splendour: for three days all was feasting and revelry, gay dancing, and lightsome music. The palace was an enchanted bower, filled with the beautiful and the brave, its walls echoing to the joyous laugh, and its marble floors to the

"ceaseless play of twinkling feet," while all around a "thousand harps were ringing out wild sounds of choral minstrelsy."

"Yet all was false and hollow." The conqueror longed to complete his triumph, the vanquished to retrieve his loss; and the peace that came in with the buds of spring, went out with the sere leaf of autumn!

SCENE IV.—THE WAR OF 1658.

The treaty of Roschild was soon broken. Complaints of bad faith were made on both sides, and the result was a second inroad of the Swedes; not, as before, by a march over the winter's ice, but by the aid of a gallant fleet over the summer sea. The port of Corseur was crowded with ships, discharging their war-freight of horse, foot, and artillery, the same hardy veterans who had dared that terrible night-march over the frozen sea. But far different was the struggle they had now to encounter. *Then*, they found a nation unprepared, and a city unfortified; the frost which favoured their own advance paralysed all efforts for defence; and aid there was none to be looked for from the friends or allies of Denmark. *Now* the capital was strongly garrisoned, and the walls repaired. It was but the end of August, and for several months the seas would be opened to the fleets of England and Holland, who were sure to interpose with ready and effectual aid; the national spirit was aroused, and the courage of the people well seconded by the wisdom of their counsellors, and the patriotic bravery of their sovereign.

War has ever been the great exciter of human energies. Nations are like flint-stones; to bring out the fire that is in them, you must strike them with the steel. It was a glorious sight when the citizens crowded to the Place Royale, and swore before Gersdorff, the grand-master, to defend the last refuge of their country. The burghers were enrolled—the students of the university formed a corps, with Gersdorff for their commander—the suburbs of the city were burned down, and the neighbouring marshes laid under the water—floating batteries guarded the harbour, and the progress of the Swedes was retarded by frequent sallies. Above all, the cordial exertions of every class were secured by a royal ordinance approved by the Senate. Hitherto place and power had been engrossed by the aristocracy; theirs were the posts of honour in war, and of profit in peace; they contributed little to the general revenue; they were exempted from the general burdens; and by repeated encroachments on the accession of each sovereign, the power and authority of the crown had passed to the senate of nobles. But now pressed hard by the imminent danger, they sanctioned a decree, abolishing their exclusive rights. Burghers were allowed to hold land, and be eligible to offices and honours; they were not to be subject to arbitrary impositions or billetings, and taxation was to be equal on all classes as being equally for the benefit of all. Great commercial privileges were granted to the metropolis, and the worst relic of the feudal times was abolished, by declaring that all serfs should be free.

The zeal of the people was raised to the highest pitch by these concessions; nobles and peasants laboured at the works side by side; all were comrades and countrymen, animated by common zeal in a common cause. The king, too, bore himself as a king should in the hour of his people's danger; he changed the royal sceptre for the knightly baton; he left his palace, and pitched his tent upon the ramparts, and from early dawn he was in the saddle, indefatigably visiting every post,

cheering the burgher's toil, applauding the soldier's vigilance, and infusing into every heart his own hope and indomitable courage. The queen often rode by his side, but her usual place was in the hospitals, attending the sick and wounded.

Still the chances of war were as yet in favor of the Swedes. Count Hannibal Schested was made prisoner, and the fortress of Cronenburgh taken by stratagem; the city was vigorously pressed on all sides, new forts raised, new batteries constructed, and many a desperate sally marked the progress of the siege.

There lies to the south of Copenhagen the small island of Amak, separated from Zeland by a wide flat covered with water, and having a deep channel in its centre; the northern end was joined to the city by a long low bridge, "which with its wearisome but needful length," stretched over the marshy shallows. This island contained four or five villages only, but the supply of provisions it furnished was of the utmost consequence, now that the Swedish fleet blockaded the harbour. This resource, however, soon failed the besieged; for, on the last day of September, Charles passed the channel in boats, with twelve hundred foot and four hundred horse, and from their watch-towers the Danes beheld the villages in flames, and the corn and forage carried off or destroyed. Enraged at the sight, numbers pressed the king to sally out on the plunderers, and his prudence scarcely restrained their ardour, when a Danish officer, in charge of two sentries, was brought in. He announced himself as Major Vanderveck, of the Holstein dragoons, some squadrons of which were in the isle of Amak when the Swedes landed; they were overpowered, and he with the rest taken prisoner, but so negligently guarded that he succeeded in making his escape. He represented eagerly that the Swedes were careless in the extreme, not dreaming of any danger from the besieged, and occupied entirely in securing their plunder; that a vigorous attack might cut them off from their boats, perhaps lead to the capture of Charles himself; or, at all events, would be so far successful as to raise the spirits of her citizens and soldiery. The commandant of Copenhagen bore testimony to Major Vanderveck as a brave and meritorious officer, and, after hasty conference, it was resolved to make a sortie with two thousand men, the very flower of the garrison, headed by Frederick in person.

In half an hour the southern gate was thrown open, the troops filed rapidly across the long bridge, formed on the level ground beyond, and then led on by the king, surrounded with "un gros de noblesse," and guided by Vanderveck, the whole body marched straight for the enemy. The Swedes were taken by surprise; part were dispersed in pursuit of plunder, part embarking in the boats, and Charles had collected little more than two hundred horse and half his infantry when the battle began. To give time for his men to assemble, the king of Sweden, at the head of his small squadron, charged gallantly; but he was met with a courage like his own. The van of the Danes fought bravely, and the rear rank closing up on either flank, pressed and hemmed in and almost surrounded their opponents. The danger was imminent; the Swedes were borne down on all sides, and the king himself wounded and unhorsed, would certainly have been made prisoner but for a seasonable aid. Colonel Arensdorff, who commanded the foot, an old and experienced officer, finding that most of his stragglers had come in, and perceiving the king's situation, left a strong guard at the boats, while he himself advanced with

a good stand of pikes into the thickest of the enemy. The shock threw them into confusion, and before they recovered from their temporary disorder, Charles and his few surviving troopers took refuge in the friendly phalanx, which then retreated rapidly but steadily to the shore. At this moment a party of troopers, returning loaded with booty, suddenly appeared on the left flank of the Danes; though not more than sixty men, they charged without hesitation, and the confusion occasioned by this unexpected attack, together with the incessant fire of musketry from the boats, enabled the Swedes to embark and escape from the conflict with the loss of a hundred foot, and the whole of their cavalry. The victors re-entered Copenhagen in triumph, and the exulting cheers of the citizens.

In October, the Dutch fleet, under Admiral Opdam, succeeded in forcing the passage of the Sound, and in consequence the Swedish ships blockading the harbour immediately retreated to Landscrona, leaving Opdam free entrance to the beleaguered city. A supply of men and provisions was thrown in, the port and sea-board were guarded by the Hollanders, and, hopeless of winning the place by famine or storm, the king of Sweden contented himself with a strict blockade, until the allies should quit the Baltic. Nor had he long to wait. In December the frost had set in, the fleet of Holland had returned, and once more the ice bridged over the flooded marshes and fosses, by which Copenhagen had been so greatly protected. In vain the besieged kept up a constant fire, to break up the ever forming ice, and redoubled their vigilance in watching the enemy. At the commencement of the year 1659 several outworks were in the hands of the Swedes, and what was worse, the privations and length of the siege had given rise to murmurs among the people. It was a strong symptom of the political eruptions which afterwards broke out, that every discontented man laid the whole blame upon the nobles, asserting that the war had been kindled by them, and was carried on for their advantage.

Meanwhile the Swedes also were nearly worn out by the protracted war, and Charles resolved to make one grand effort to storm the city. He drew up his troops in four columns, three of which, under Marechal Bannier, Count Toot, and General Steinbach, were to attack the defences on the north, south, and east, while the fourth was held in reserve to act as occasion might require. An hour before midnight the Swedes were under arms; the leading companies wore white shirts over their uniforms, partly to render their advance on the snow less visible, and partly to distinguish them from the Danes in the general confusion. All were primed with brandy, and stimulated by hopes of plunder; and there they stood, ragged, soiled, war-worn men, excited to a wolfish eagerness for blood, waiting for the signal-flame that was to let them loose on the devoted city.

That very evening a deserter entered Copenhagen, and brought intelligence of the impending danger. The walls were instantly manned the points of attack strengthened, parties of sailors landed from the Dutch ships to act as artillery men, and every one capable of bearing arms was summoned to assist the garrison. Before midnight the preparations were fully completed, and then came a fearful pause of expectation, when "the bravest held their breath for a time," so mighty were the interests to be decided ere the morrow's dawn.

There—there is the signal! To the west of the city a bright yellow

flame shot upward from a mass of tar and rosin, and the sudden blaze was followed as suddenly by the tramp of disciplined men. It was Steinbach's division advancing on the side of the Royal palace, where Frederick commanded in person. On they came, right up to the margin of the fosse, regardless of the cannon and musketry that thinned their numbers; the rear-ranks broke away from the column, and, half burying themselves in the snow, kept up a constant fire, while the leading files scrambled into the ditch, and by scaling ladders, fascines, and broken pieces of ice, managed to gain the foot of the wall, where they were in some measure screened from the fire of the garrison. Hundreds passed in this manner, and attempted to scale the ramparts. Some of the ladders broke, and the assailants rolled splashing into the fosse; others were thrown down by the enemy, or proved too short for the purpose. Yet, notwithstanding these casualties, a number of the Swedes succeeded in mounting the walls either by ladders, or six at a time, these were instantly shot or hurled back by the Danes before the remainder could support them. Four hours the assault was maintained with inveterate obstinacy by the Swedes, until the death of Steinbach, their general, and the prodigious loss they had suffered, compelled them to retreat. The instant they began to fall back, the king of Denmark galloped to the quarter assaulted by Count Toot, and found to his inexpressible joy that he too had been completely repulsed; again he hurried off to the post where Gersdorff commanded on the north-east, and arrived just in time to join in the exulting cheers which announced the retreat of the third column and the capture of Maréchal Bannier their leader. The slaughter of the Swedes had been immense, and Charles shut himself up in his camp in an agony of rage, while the Danish soldiers sallied out to plunder the fallen, and the citizens, with grateful hearts, crowded into the churches, and offered up a thanksgiving for their great deliverance.

The indomitable resolution of the king of Sweden would still have lengthened out the war, but for the interference of England, France, and Holland, who compelled him to enter into a treaty for the pacification of the North. Yet, as the English fleet under Admiral Montague, was recalled on the resignation of Richard Cromwell, it may be doubted whether peace would have continued long, and it was probably a fortunate circumstance for Denmark, that in the following year, (1660,) on the very day of his assaulting Copenhagen, the king of Sweden died.

With his death the first act of the drama closes, the sounds of war ceases, and the scene changes from the camp to the senate; from the contest with a foreign enemy to the struggle for political rights, and the tumult of a strange revolution.

THE WAGS:

[CONCLUDED FROM PAGE 627.]

It was Christmas eve, and the whole of the family were congregated in the little back parlor, when young Jerry started up at the well-known sound of a customer at the shop door, at which he arrived with a hop, step, and a jump; and jerking it open, beheld a little old gentleman wrapped in a large cloak.

"Please to walk in, sir," said Jerry Wag.

"Hush!" whispered the stranger, placing his fore finger on his mouth, "I want to surprise them. You're all together to night, I suppose?"

"Yes, sir," replied Jerry, smiling, for he thought he knew to whom he was speaking.

"That's right," said the odd elderly gentleman, advancing cautiously toward the darkest part of the shop, and throwing off his cloak. "Now for a Christmas frolic! Come here, you rogue! Why, you've grown taller than me. That's right! a thriving Wag! Now, mind, you go back as if nothing had happened, and give me hold of your coat tail, so that I can't be seen. That'll do. No laughing, young monkey. There, stop."

Jerry did as he was bid, save that, though he bit his lips unmercifully, his visible muscles would not remain inactive; and thus the oddly joined pair made their way into the family department just as the eldest daughter exclaimed. "Now, mamma, it's your turn to wish!"

They were sitting in a semi-circle before the fire, and the stranger and his shield, of course, stood behind them.

"Heigho!" said Mrs. Wag, "there's only one thing I wish for to-night, and that is the addition of *one* more to our party."

"Name! name! You must name your wish!" cried three or four juvenile voices, in full glee.

"I wish I could tell you his name," said Mrs. Wag, "but your father knows who I mean. Don't you, my dear?"

"I can't mistake you, my love," replied Jeremiah, affectionately, "and I wish he could see how happy we are. It would do his heart good, I really think."

"Who *can* he be!" exclaimed the eldest daughter.

"Perhaps it's somebody like me!" cried the little odd gentleman, stepping briskly forward.

"It is! it is!" shrieked mamma, and up jumped the whole party, and down went Mrs. Wag upon her knees, while, utterly unconscious of what she did, her arms were clasped round the neck of her benefactor, whose bodily frame, being unable to sustain her matronly weight, gave way, and so they rolled together on the floor.

"Ha, ha, ha!" laughed the eccentric elderly gentleman, as soon as he recovered breath, but without attempting to rise. "This is a Christmas gambol, eh! Master Wag? Eh! my merry little Wags? Need n't ask you all how you are."

"My dear sir!" exclaimed Jeremiah, "allow me to assist you. I hope you are not hurt."

"Hurt!" cried the little gentleman, jumping up and offering his hand to Mrs. Wag. "Hurt! Why, I feel myself twenty years younger than I did five minutes ago. Never mind, ma'am. Like Christmas gambols. Always did. Happen to have such a thing as a bunch of misletoe, eh?"

"I am sure, sir," whimpered Mrs. Wag—"I am sure I shall never forgive myself. To think of taking such a liberty; I—I—can't conceive how I could"—

"As often as ever you please, my good lady," said the eccentric, handing her to a chair; "but sit down and compose yourself, while I shake hands all round;" and, turning toward Jeremiah, he commenced the ceremony, which he went through with from the eldest to the youngest, call-

ing them all by their names, as correctly as though he were a constant visitor.

A right merry Christmas eve was that. The young Wags were, ever and anon, obliged to hold their sides, as they laughed and screamed with delight at the funny stories told by the funny little old gentleman, who romped and played with them with as much glee as though he had been the youngest of the party. So the hours passed quickly away till the unwelcome sound of "bed time" was whispered among the little circle; and then one after another departed, until Mr. and Mrs. Wag were left alone with their honored guest.

The hearts of both were full, and they began to endeavor to express their feelings; but the singular old gentleman stopped by saying—"Need n't tell me. Know it all. Shall run away if you go on so. Remember, I told you I had more of the 'ready' than I knew what to do with. Could n't have done better with it, eh? Out at interest now. Best sort of interest, too. More pleasure this evening than receiving dividends, eh? Never was happier. So come, let us wind up for the night. I've a memorandum or two for you in my pocket-book," and he placed it on the table, and began to turn over divers papers, as he continued—"Hem! ha! yes! Those two. You'd better take them, my good sir. They'll admit William and Stephen to Christ Church—what they call the blue-coat school. Capital school, eh?"

"My dear sir!" exclaimed Jeremiah.

"Do n't interrupt me, that's a good fellow," said the old gentleman.

"Hem! Do you ever smoke a pipe?"

"Very rarely," replied the wondering Mr. Wag.

"Well," continued his guest, "take that paper to light your next with. Put it into your pocket, and do n't look at it till I'm gone. Hem! Tom's master says he will make a good scholar; so, if you've no objection, I was thinking he might as well go to college in a year or two. Not in your way, perhaps? Never mind. I know some of the big-wigs. See all right, and enter his name. *Should* have one parson in a large family, eh?"

Here Mrs. Wag could no longer refrain from giving vent to her over-carged feelings by certain incoherent ejaculations, which terminated in a flood of tears.

"Humph!" said the old gentleman, "my spectacless want wiping;" and he took the opportunity of rubbing them and blowing his nose, while Jeremiah was comforting the wife of his bosom, and telling her not to be so foolish, although he could scarcely avoid snivelling himself.

"Hem! ahem!" resumed their guest; "think I've got some of the mince pie sticking in my throat. Stupid old fellow to eat so much, eh?"

"Better take another glass of wine, sir," said Jeremiah. "Give me leave, sir, to pour it out."

"No, no!" exclaimed Mrs. Wag, starting up and smiling through her tears, "let me! Nobody else! God bless you, sir!"

"And you, too!" ejaculated the old gentleman, gayly; "come, that's a challenge! Glasses round! Glasses round! and then we must say, good-night. Don't let us make a dull end of a merry evening."

Warm benedictions were forthwith uttered, and the "compliments of the season" were wished, with more than common sincerity, by all three, as their glasses met jingling together. Then, the whimsical guest tossed off his wine, jumped up, shook his hosts heartily by the hand, wished

them good-night, and sallied into the shop to find his cloak. Mr. and Mrs. Wag followed, and expressed a hope that he would honor their Christmas dinner by his presence on the following day; but all they could draw from him was—"Can't promise. Ate and drank a little too much to-night perhaps. Getting shockingly old. See how I am in the morning. Enjoyed myself this evening. A jolly set of Wags altogether! Merry Wags all, eh? Young and old. Well, well, wag along happily, my dear Mr. and Mrs. Wag! Good-night!" and after once more shaking hands with them, he nimbly whisked himself out at the shop-door, and trotted across to the King's Arms.

No sooner were the worthy couple alone, than curiosity led them to examine the piece of paper which their benefactor had presented to Jeremiah for the purpose of lighting his pipe; and it proved to be the promissory note which the latter had signed for the first thousand pounds. The donor's intention was plain enough, as it was regularly cancelled, so Mrs. Wag was obliged to use her pocket-handkerchief once more; and her spouse, after striding three or four times rapidly across the room, felt himself also under the necessity of taking out his, and blowing his nose with unusual vehemence. Then they congratulated and comforted each other, and said their prayers, and offered up their thanksgiving with a fervor and sincerity that proved they were not unworthy of their good fortune. Then they retired to rest, though not immediately to sleep, for they were each beset by strange waking dreams, and beheld in their minds' eye a black clerical Wag, two long-coated little blue Wags, with yellow nether investments, and other Wags of sorted sizes, but all very happy.

On the following morning, being Christmas day, our fortunate shopkeeper equipped himself in his best apparel, and, before breakfast, stepped across the road, and found Mr. Titus Twist rubbing his eyes in his own gateway. Mutual salutations, and "compliments of the season," were exchanged in good neighborly style, and then mine host exclaimed, "There's a box here for you, Master Wag, left by that queer little old gentleman: I'm sure he's cracked! In he comes here yesterday, just after dark, posting in his own carriage. Well, he orders up any thing as we happened to have ready, and I sets him down to as good a dinner as ever any gentlemen need sit down to, though I say it, because why, you see, our larder's pretty well stocked at this season. So down he sits, rubbing his hands, and seeming as pleased as Punch, and orders a bottle of wine; but, before he'd been ten minutes at table, up he jumps, claps on his cloak and hat, and runs smack out o' the house, and never comes back again till past eleven at night, when he pays his bill, and orders horses for six o'clock this morning."

"Is he gone, then?" exclaimed Jeremiah.

"Off, sure enough," replied Titus; "but he's left a great box for you, which I was just going to send over. So, I suppose you and he have some dealings together."

"Yes," said Mr. Wag, "I shall have cause to bless and thank him the latest day I have to live; but I wish he had stopped here to-day. Well, God bless him, wherever he's gone. Hark ye, neighbor—you have often heard me speak of having a friend—well, that's him. I do n't know why, but he's taken a fancy to me and my wife and family, and has done for us more than you'd believe, if I was to tell you. However, we can chat that over another day, as I can't stop now, Mrs. Wag and children are

waiting breakfast. But where's the box? I'll take it with me, if you please."

"If two of the strongest fellows in my yard can take it over, it's as much as they can," replied Titus. "However, they shall try; and I hope you'll come over this afternoon and crack a bottle of my best to drink the little queer old gentleman's health. But mind me, he's cracked to a certainty, and you'll find it out some of these days."

The box was accordingly delivered, and, on being opened, was found to contain a dozen separate packages, each directed for one member of the Wag family, the largest for Jeremiah, the father, and the smallest for little Philip, a "rising three" year old Wag. Their contents were far too various for precise specification, but could not have been more judiciously appropriated nor more gratefully received, so that Christmas day was a day of rejoicing; and the only regret felt by one and all the Wags was, that their very kind friend had not stayed to spend it with them.

When the festive season was over, matters went on as usual with Jeremiah, save that perhaps there was more of cheerfulness in his manner while pursuing his course of steady industry. The fact was, that he never now felt perplexed about money affairs, which were wont formerly to occupy much of his time by day, and cause him many sleepless hours by night. Those who called for payment were as welcome as those who came to pay, and consequently his credit stood high; and the travellers and London houses strove, by tempting bargains and peculiar attention in "selecting the best articles, to complete his kind orders," to keep his name upon their books. So he went on and prospered in all his undertakings, and in the course thereof visited the metropolis to make purchases, and, when there, called upon Mr. Goodfellow, who gave him a hearty welcome, but could not be persuaded to reveal the name of his eccentric client, though he scrupled not to say that he was in good health, adding, with a smile, "and in perfect possession of his intellects."

Jeremiah next endeavored to worm the secret from his bankers, but with no better success. The partner who received him, assured him that the steady increase and respectability of his account had wrought such an impression in a quarter which he was not permitted to name, that their house would feel much pleasure in making advances, whenever any thing advantageous offered itself for purchase.

"It is wonderful!" exclaimed Jeremiah.

"A good character, my dear sir," observed the banker, "is every thing in trade. We are dealers in money; and nothing pleases us more than placing it where we know it is safe, and have every reason to suppose it may be useful.

"But," observed Jeremiah, "you know nothing about me."

"I beg your pardon, Mr. Wag," said the banker; "you are what we call a good man, and have got a back."

"A back!" exclaimed the bewildered shop-keeper.

"Yes," said the banker, smiling, "that is a good friend to your back; and, though he choose to keep himself in the background, depend upon it he'll not forsake you so long as you go on as you have done. Therefore, buy away for ready cash as largely as you please, and we'll honor your drafts."

On this hint Jeremiah subsequently acted, by making purchases which enabled him to serve his customers" on terms that defied all competi-

tion." Therefore, and by dint of strict attention and civility, his trade continued to increase, till he was obliged to add ware-houses to his shop, and employ a regular clerk and collector, besides shopmen, porters, and wagoner.

In the meanwhile young Tom Wag studied Latin and Greek with a neighboring curate; William and Stephen were, in due course, admitted into the Blue-coat School, and the education of the other children went on precisely as had been recommended by their eccentric benefactor, whose advice Mr. and Mrs. Wag considered equivalent to commands. Still they were often uneasy about him, and more particularly after another Christmas eve had passed without his appearance. Poor Mrs. Wag was sure he was ill, and would occasionally charge him with unkindness for not letting her know, that she might go and nurse him. But again months and months rolled away, and at last autumn arrived, and with it brought the grand *denouement* of the mystery, as suddenly and unexpectedly as their former good-luck.

All the Wags who were at home were sitting round a tea-table, in the little garden at the back of the house, and Mrs. Wag was sedately filling their cups, when one of the younger children exclaimed, "Who's that?"

Jeremiah looked round to where the child was gazing, and beheld his benefactor stealthily approaching from the back door, with an arch smile on his countenance, as though wishing to take them by surprise; but perceiving that he was discovered, he stepped nimbly forward according to his usual custom, and holding out his hand, said, well, my dear Wag, how are you? How are you, my dear Mrs. Wag? and how are you, young Jerry Wag, Mary Wag, Sarah Wag, Henry Wag, and Philip Wag?"

All expressed their delight at his appearance, according to their different ages and abilities, but all were evidently delighted, and none more than the strange little gentleman himself, whose eyes sparkled with gratification as he took his seat, looked round at the joyous group, and begged to join their family party. Mrs. Wag felt somewhat tremulous at first, and doubtless her visitor perceived it, as he turned his attention to the little Wags till she had finished her table arrangements and presented him with a cup of tea.

"Thank you, my good lady," said he; "that's as it should be. All merry Wags together, eh?"

"We—we—thank God!" whimpered Mrs. Wag, "we are—Yes! But it's all your doing, sir. I wish I could thank—thank you—as I ought."

Here Jeremiah, perceiving that his spouse was too nervous to make an excellent speech, "took up the cudgels" of gratitude; but, saving that there could be no doubt of his sincerity, displayed no great oratorical talents. Brief, however, as his speeches, or rather ejaculation, were, the funny old gentleman stopped him by the apparently funny observation,—

"So, my good Jeremiah Wag, you do n't know where your father came from?"

"No, sir, indeed," replied the shop-keeper, marvelling at the oddity of the question.

"Well, then, I do," said his benefactor; "I was determined to find it out, because the name is so uncommon. Hard work I had, though. Merchant, to whom he was clerk, dead. Son in the West Indies. Wrote. No answer for some time—then not satisfactory. Obligated to wait till he came back. Long talk. No use. Well, well. Tell you all about it

another day. Cut it short now. Found out a person at last who was intimate friend and fellow-clerk with your father. Made all right. Went down into the north. Got his register."

"Really sir," stammered Jeremiah, "it was very kind of you, but I am sorry you should have given yourself so much trouble; but I'm sure, if I have any poor relations that I can be of service to in employing them, now that your bounty has put me in the way of doing well, I shall be very glad, though I never did hear talk of any."

"No, Master Jeremiah," said the eccentric old gentleman, "you have no poor relations now, nor ever had; but your father had a good-for-nothing elder brother, who left home at an early age, after your grandmother's death, and was entitled to go abroad by fair promises, which were not fulfilled. So, not having any thing agreeable to write about, he did n't write at all, like a young scamp as he was, and when the time came that he had something pleasant to communicate, it was too late, as his father was no more, and his only brother (your father) was gone nobody knew where. Well, to make a short story of it, that chap, your uncle, was knocked about in the world, sometimes up and sometime down, but at last found himself pretty strong upon his legs, and then made up his mind to come back to Old England, where he found nobody to care for him, and went wandering hither and thither, spending his time at watering-places, and so on for several years."

"And pray, sir," inquired Jeremiah, as his respected guest paused, "Have you any idea what became of him?"

"Yes, I have," replied the little gentleman, smiling significantly at his host and hostess. "One day he arrived in a smallish town, very like this, and terribly low-spirited he was, for he'd been ill some time before, and was fretting himself to think that he had been toiling to scrape money together, and was without children or kindred to leave it to. No very pleasant reflection that, my worthy Wags, let me tell you! Well, he ordered dinner, for form's sake, at the inn, and then went yawning about the room; and then he took his stand at the window, and, looking across the road, he saw the name of Wag over a shop-door, and then—You know all the rest! The fact is, I am a Wag, you are my nephew, and you, my dear Mrs. Wag, are my niece, and so let us be merry Wags together!"

Here we might lay down the pen, were it not for our dislike to strut in borrowed plumes; and that inclineth us to inform the gentle reader that no part of this simple story is of our invention, except the last disclosure of the senior Wag's relationship to his namesake, which we ventured to add, fearing that the *truth* might appear *incredible*. The other facts occurred precisely as we have stated. An elderly gentleman bearing a name more singular than Wag, returned home from India with a handsome fortune somewhat more than half a century back, and sought in vain for relatives; but one day, from the window of an inn, at which he had arrived in his own dark-green travelling chariot, he espied the shop of a namesake, whose acquaintance he instantly made; his expressed hope was to discover that they were connected by some distant tie of consanguinity; but failing in that object after most minute investigation, he never withdrew his patronage. For many years he watched over the rising fortunes of the family; and as the young people arrived at maturity, provided for them as though they were his own children, to the extent of many thousand pounds; and when he died, left among them the

whole of his property. Now, though the heart and conduct of this good man were truly benevolent, there can be no question respecting the motive of his actions, for he often avowed it. He was determined to *keep up* the respectability of his *name*; and with great pleasure we have to record that the few who now bear it, move in a much higher circle than would have been their lot but for him whose memory they hold in reverence, and consider as the founder of their family. Reader! imitate him, and "*keep up*" the respectability of your name.

SKETCH OF THE HOUSE OF LORDS.

[We abridge the following admirable sketch from one of a series of papers in the *Britannia*, entitled, "The Anatomy of Parliament."—*Editors Spirit of the Times*.]

In all probability, the majority of my readers have never been within the walls of the House of Lords; and would rather have a circumstantial description of what it really is, than to be called upon to indulge at second-hand in associations which are, after all, somewhat trite. For this purpose, then, we will post ourselves in the gallery appropriated to strangers.

At the further end of the house, between the two high glazed doors which form the peers' entrance, is the throne. It is placed under a splendid canopy, and raised two or three steps from the floor. All that is not gilded is covered with crimson cloth. Behind the throne, under the canopy, in a circular emblazonment of gold, are the Royal initials; but, by a strange negligence, the "W. R." has not yet been replaced by the initials of the Queen. The space in front of the throne, and on the steps, is occasionally occupied by gentlemen who are introduced by the Lord Chancellor's order, and the three or four aristocratic looking boys who are paying such devout attention to the proceedings are the sons of peers. Immediately in front of the throne is what is called the wool-sack—a large crimson mound or bank, like nothing but itself, in the centre of which sits the Lord Chancellor, in all the glories of a silk gown and full judicial wig. A less commodious seat for one who has to be there many hours, after a fatiguing day in the Chancery Court, cannot well be conceived. Other peers occasionally lounge about on the wool-sack, though, as there is no back to lean against, one is at a loss to account for their taste. Immediately in front of the wool-sack are two other banks of the same kind, stretching forward into the house, which are also used as seats or lounging-places. The Princes of the Blood generally occupy them when present in the house. In front of these is the table, at which sit, with their faces to the Chancellor, two or more clerks, (barristers) in wigs and gowns; and, occasionally, a master-in-chancery or so. The former individuals have to read petitions and other matters, to the house, when required to do so, and are chiefly distinguished by being the worst readers in the United Kingdom. In front of these is the table, between it and what is called the "bar," behind which strangers and members of the other houses are admitted, are situated the cross

benches of the Duke of Richmond and other neutral noblemen—those who have not yet made up their minds, or who have no minds to make up. The great mass of Peers are ranged on benches, stretching on each side along the sides of the house, from the glass doors before mentioned down to the bar. Of these the government and their supporters sit on the right of the Chancellor, and the opposition on the left. As you view them from the strangers' gallery, or stand at the bar, however, these positions of course, appear reversed—the opposition being on your right and government on your left.

So much for the ground plan; now for the filling up. But before you begin to inquire who the individual peers are, the first impression that strikes you is the gentlemanly aspect of the whole assembly. No buzz, no creaking of boots and scraping of feet, such as you hear in the House of Commons—but all quiet, easy, and well-bred. You instinctively feel that you are in an assembly of gentlemen, nor do you hear or see any thing to dispel the illusion. The Peers are, in one peculiar respect, distinguished from the Commons; they pay due attention to dress. There are no dirty, vulgar men in the House of Lords—no men with soiled stockings and disordered shoe-ties. They do not seem to favour the delusion that slovenliness and talent have any necessary relationship.

Now for the peers themselves. Immediately on the right of the Lord Chancellor, and on the extreme left of the house, as viewed from the gallery, is the bench of bishops. In the front is a weak, sickly-looking prelate, in a close fitting dark whig. He is the Archbishop of Canterbury, against whom not even his enemies have a word to say. He can champion the church without provoking the ire of her foes. Near him is the less abstracted, but scarcely less respected, Bishop of London. His full, rudy face, offers a fine contrast to the pale visage of the Archbishop. Conspicuous among these divines is the celebrated Bishop of Exeter.—The next seats to the bench of bishops, farther down the house, on the right of the Chancellor, are occupied by ministers. In the midst of them sits, or rather lolls, the all-potent, because all-impotent, Melbourne. Observe the careless air, with which his white hat is tilted off his forehead, and the *dolce far niente* which his whole bearing expresses. He is turning hastily over the leaves of a government bill—it is the first time he has looked at it, though the order of the day for its second reading is being moved! The tall dandy, with a face like a Saracen's head in acute grief, is the Marquis of Normanby. An elderly gentleman next him, fresh-coloured, and with a staid, respectable air, is his brother-Marquis of Lansdowne. A very stout, infirm old man, with crutches, a bald head, and bearing in his face a marked resemblance to the great Charles James Fox, is his nephew, Lord Holland. He is chiefly remarkable for vociferous cheering at inconvenient times, and for making good speeches, greatly to the embarrassment of his colleagues. To the right of the Marquis of Lansdowne, you will observe a Peer with a peculiarly sheepish expression, and enormous shirt-collar—that is Lord Duncannon. In spite of his very silly appearance, his lordship is one of the few men of business in the ministry; but the desk, not the house, is his sphere. Immediately adjoining the ministers, on their right, and at the head of a bench that is scarcely separated from theirs, sits Lord Brougham. He displayed his usual sagacity in the choice of that seat. He is as it were among the ministers, but not of them; yet the neutrality of his position is not so marked as to signify the impossibility of his re-union. Behind the noble and learned lord, on the back bench sits the Earl of Radnor.

To his right sits the Marquis of Clanricarde, concerning whom, even his friends are silent; near him, also, sits Lord Denman, with that fine severe face of his—the index of so much more than his mind contains.

Let us now turn to the conservative benches, on the left of the Chancellor. First, in all points of view, let us single out the Duke of Wellington. He sits at the end of the first bench, in front. His dress is the simplest, consisting of a blue frock coat, and plain white trousers. His attitude is singular. With his arms folded, his head sunk on his breast, his hat slouched over his eyes, and his legs stretched out their full length on the floor, he would appear to be asleep and regardless of all that is going on. But if you watch his mouth, you will perceive that he is engaged in deep thought, and frequently he rises and proves that he has been so, either by delivering a plain, manly, John Bull-like exposition of his views, or by answering in detail the arguments of those who have gone before. Next to the illustrious duke, is his parliamentary squire, Lord Ellenborough—the Peer with a full fresh-colour, and curling dark head of hair. One of the most clear headed and sensible of his party; he has until lately, neglected business for pleasure, but he is now an altered man, and seems wisely to have become a parliamentary pupil of the Duke. Immediately on his right is a dark-haired pale man, dressed in black, and with the air of a very serious clergyman of the establishment—it is the Earl of Aberdeen, also a strong clear-headed man. Lower down, an infirm old man, with white hair, and supported by crutches, is Lord Wyndford; near him is Lord Kenyon, the peer whose cheek is ruddy with health, but whose hair and whiskers are white as snow. Behind the Duke, on the back bench, is the Earl of Wicklow, a stout rudy-faced man, with sandy hair. When he does not get into a passion, there are few more sensible men in his party. On the same row, at the extreme end of the house, farthest from the Lord Chancellor, Lord Lyndhurst has chosen to post himself, for what reason it is difficult to say. Quite cut off from the other leaders of his party, it would seem that the inconvenience of the position is its charm. Any other man would feel embarrassed at having to address the house from such a distance; but Lord Lyndhurst's fine, clear, manly, trumpet-like voice, overcomes all obstacles of space, as his self possession overcomes all those of situation; and he makes himself heard, *aye, and felt too*, in any part of the house.

If the strong and characteristic contrast between the House of Commons and the Upper House be marked in the building, its decorations, and the personal appearance of the members, how much the more evident is it in their respective modes of conducting a debate! The reader is aware that scenes of riot and confusion occur at times in the Lower House, in comparison with which the counsils of the Indian *Sejenachs* are venerable. In the House of Lords no such scenes occur. The only event of the kind that at all approached to them, was when the late king came down to prorogue parliament after the rejection of the Reform Bill. But how different was the display of feeling! If ever strong excitement was pardonable, it was on such an unprecedented occasion. Yet it did not degenerate into riot, as is the case in the House of Commons; and their lordships had scarcely given way to it when it was put a stop to.—Almost every man who rises in that house is, more or less, a statesman. He feels himself—not the representative of a mere class, the advocate of an isolated few, but one of the guardians of the welfare of the community—a member of the high court of appeal of the nation—the constitutional moderator of the passions and prejudices of the people.

RUDOLPH OF WERDENBERGH; OR, THE FREEDOM FIGHT
OF APPENZELL!

AN HISTORICAL TALE.

BY HENRY F. HARRINGTON.

SWITZERLAND, by the prowess of her mountain sons, had been wholly freed. But Appenzell, a neighboring province, lying between St. Gall on the West and the Rhine on the East, had not been a partner in the glorious league, and her children yet frowned beneath the lash of oppression. The Abbott of St. Gall was their hated lord—taxes were heaped upon them and the cruelty and extortion of his menials pressed the galling chain into their already festering flesh. It was vain to plead poverty, or hope to evade the burden; for the ferocious dogs were let loose upon the unwilling, and the wages of tyranny were steeped in blood.

But there are lands whose very breath is freedom; and such is Appenzell. The winds that blow over her valleys from her heaven-piercing mountains have no taint of slavery—the snows that glisten on their jagged peaks, and the glaciers that sleep on their bosom, are stainless forever; and stainless, too, are the hearts that are bathed in those roving winds—fetterless the feet that tread the snow track, and climb the slippery ice-hill. Appenzell bore affliction long; but when the grave of the dead was violated, and the clothes in which filial love had robbed the cold clay of a parent, were stripped from the corse by fiendish rapacity, it was time for action. It was but to resolve and the land was free! By one bloodless effort every minion of the Abbot of St. Gall was expelled from the scene of his iniquity.

The ten imperial towns of Suabia were the Abbot's close allies; and in an ecstasy of rage and apprehension at this simultaneous and bold uprising of those whom he had regarded as brutes, to be scoffed at and trampled upon, he called upon them for their mighty aid. It was granted; and on the morning of a day in May, 1403, a brilliant array of proud sould chivalry, that was but the van of a well-appointed army of foot, numbering thousands in its ranks, crossed the Linsenhel, and with braying trumpets and lofty hope, marched for the heights of Voeglinseck. But Appenzell was wide awake. She had called upon the Swiss confederacy for alliance and aid; and though Schwyz alone grasped her offered hand in full companionship, and sent three hundred bold men to help her, yet two hundred volunteered from Glaris, and the men of Appenzell, arrayed with their good allies, found themselves two thousand strong—two thousand poor peasants against six thousand war-trained veterans—but those peasants were from the mountains of Switzerland.

Watchmen were on the cliffs, and when that army came, fire answered fire from height to height, in wide and full alarm. One embrace of wives and children, and the Appenzellers were ready. Eighty posted themselves so as to command the hollow way, while their allies were stationed under the concealment of a wood. On came the cavalry in warlike array, with swords outdrawn and flashing in the sunbeams. They pass now within the shadows of the narrow path, where the very loneliness whispers of danger—they grasp with firmer clench their friendly blades, and spur their proud horses hard. But now a shout makes the echoes ring; and the ambushed eighty shower stones upon them from their practised slings, and wound them with sure aimed lances; while the men of Glaris and Schwyz sally out from the thickets, rush upon

them in flank, and lash them into confusion. But "on! on!" though danger and death be threatening from every tree, and every overhanging crag, "on!" is the war-word of chivalry!—and on they go in desperate conflict and almost desperate loss. They reach the height at last; but there outpours the whole power of Appenzell, like a mountain-torrent—as it was indeed—a torrent of *soul* foaming upon these rocky boundaries that would hem it in, and dam its leaping current. What could the Swabians, bestriding fiery chargers on the craggy height, with foemen all around? "Back! Back!" shouts the leader, in very pity for his gallant troop, and turning short they gallop madly down. The five thousand infantry are advancing in close and fearful column; when, at once, the retreating horsemen appeared in rapid flight. "The day is lost!" flies from rank to rank. They waver, they hesitate, they halt! Glad moment for the Appenzlers! who charge upon them from every point, and as they fly along the hollow, death-fear on every face, slay them as all were but play. The horsemen—the bold cavaliers—are allies, triumphant allies, ay, of the very Appenzellers! for they dash in fear, with trampling hoof, through their own array, and crush with dreadful death! Alas! for the glory of the ten imperial towns, the allies of the Abbot of St. Gall! Six hundred cavaliers lie mangled in the pass, and who shall number the ignobler dead?

Many of the most experienced soldiers and the truest citizens of the ten imperial towns had perished in the fearful conflict, which then withdrew their support from the cruel Abbot of St. Gall; for they could not afford to make widows of more wives, and leave more children fatherless. In this extremity, he resolved to bestir the lion of Austria, that if its echoing roar did not scatter fear through the peasant horde, its angry gripe should surely be its revenge. So he assailed the Duke Frederic with earnest and persuasive appeals to muster men and fight in his own, if not the Abbot's behalf. He prevailed. Fearful of the loss of his seignories in the Higher Alps, should the Appenzellers prove victorious, he called out a powerful force, which, formed into two divisions, marched for the contested ground; the one upon Arbon, the other upon St. Gall. The sky looks black for Appenzell!

'Twas a gladsome day for Werdenbergh, when Count Rudolph, its lord, brought to the old domain, the bride of his heart and bosom.—There was merry making then; and the sweet Linda smiled, and the tears glistened in her eyes, as amidst the shouts of the dependants, and perfume of flowers, strewn by young maidens in her path, she rode to the castle gate.

"I bring thee to no humble home, lady mine," gallantly and lovingly cried Rudolph, as they rode; "Look you! yon majestic castle will be our abiding place; and beneath its sacred roof, sacred indeed to me, my noble ancestors have dwelt for centuries, with not one stain of cowardice or dishonour, to blot our fair escutcheon! Far too, as thine eye can see, the town, the villages, the vallies, all are thine and mine—mine from those father-warriors, whose valour won and preserved them. When Rudolph yields them up, be the day of his degradation the witness of his death!"

The feast and the dance completed the festivities of that long-remembered gala-day, and not until the "noon of night" had flitted by the castle on its sombre and shadowy wing, did the revellers repose in the weariness that is the fruit of the merriest gladsomeness, as well as of the

sturdiest toil. All at last was still; save the tramp of the sentries maintaining strictest watch; for those were days when the sword of aggression was sharp, and the eyes of the aggressor were wide open. Time had elapsed for Rudolph to be sunk in repose, when plainly, to the startled sentinels,

"Adown the glen, rode armed men,
Their trampling sounded nearer."

Afar off, in the Rhienthal, (the valley of the Rhine,) were the confused and mingling sounds, familiar to a soldier's ear, of the steady approach of a body of horse; the click of armour and the clatter of many hoofs, like the rush of a mountain torrent. Soon, nearer far than the main body, the rapid gallop of a single steed was heard. It ascended now the hill side near the castle, and the brisk notes of a trumpet aroused the slumbering echoes. It was answered as merrily and at once from the castle wall, chasing from the eyelids of the sleepers their short repose. Rudolph started up, and arrayed himself at the summons, and was the first to meet in the hall, a well accoutred squire.

"Welcome, Sir Squire," cried he; "not the less that your coming is somewhat importune, and I cannot therefore give so fair a greeting as becomes the hospitality of Werdenberg."

"Thanks, thanks, Count Rudolph," answered the squire, with a jaunty air, that brought a frown to Rudolph's brow, though it was not discerrible in the dim torch light; "it boots little to myself, but I stand herald here, to Grindel of Mayenfield and fifty other loyal knights, who will be right glad with their five hundred retainers to take that hospitality: for they have ridden hard since yesterday's sun."

"They are all full welcome," replied Rudolph, smothering his anger at the seeming insolence of the squire, "and by my knighthood they are near, if that trumpet be blown among them; and speed to be ready were well befitting."

"They rode not far behind me, and I opine they mount the berg at this moment," said the squire.

Rudolph hastily sounded through the castle the note of preparation. The servants were aroused, lights gleamed in every window, the disordered tables were set in array, the meats, whose lordly plenteousness, the feast of the evening, for which they had been prepared, and to which ample justice had been done, had not the half been consumed, were brought out, the huge flagoons were filled; and when the gates swung back on their ponderous hinges, and the rough pavement of the court-yard resounded with the ringing of many hoofs, while hundreds of voices joined in tumultuous din, Rudolph was by to extend the hand of greeting to Grindel of Mayenfield and the fifty knights, and felt no misgiving that they would find right dainty viands and enough, to satiate their hunger. He sprang to Grindel's charger's side, with high born courtesy, and gently pushing aside the attendant squire, assisted him to dismount, speaking at the same time, words of heartfelt welcome. The Knight of Mayenfield replied, but there was something bold, assuming, and cavalier in his tone; and when all were out of the saddle, and entered the hall, they sprang to the tables and attacked their goodly store, with an indifference to Rudolph, that he was ill disposed to brook. Grindel, without a word, had seated himself at the table's head, in Rudolph's own place, and cheered his companions to ply their knives and attack the portly flagoons, as though he were at his own board in Mayenfield, and these his bidden guests.

"By my faith, Sir Grindell," cried Rudolph, standing near, "thou dost administer the rites of hospitality as faithfully as though I had fairly delegated my place to thee, and thou hadst not elected thyself my representative. And yet I am full fain to display my own prowess as the host, and lead these gentlemen to the charge; so, if it please thee, be thou the guest, and sit here in this seat of honour on my right; while I warrant thee, thou shalt have nothing to complain of in my administration."

"Set thee at rest" cried Grindel, whom huge draughts began to warm; "I care not now to change, and it little matters! Fill up! Fill up! to the brim and pledge me, all, to our master Frederic, and the gay plumed peacock* of Austria!"

Rudolph, whose mind was engrossed by the contemplation of Grindel's insolence, stood aloof with folded arms and scowling brow, half resolute to rush from the hall, summon his retainers, and eject at once, the daring revellers, or force them to purchase with bloody price the freedom they now audaciously assumed. In such a frame of thought, he did not note the toast proposed by Grindel, to which the knights gave tumultuous assent, and which they drank on foot with stunning shouts, in brimming bumpers. When they were seated again, Grindel turned to him, and sneeringly exclaimed—

"Does it not suit thee, Sir Rudolph, that your brow is knitted—this our toast? Now, by St. Francis, but this open rejection of the Duke Frederic may chance to reach his ear!"

Rudolph started from his position, and, advancing to the table, seized a goblet, and replied:

"Such a tale to the Duke were foul and shameful; and thus I prove my friendly heart; 'Here's to the great Duke Frederic!'—He drained the bumper to the dregs; and added, with bold and fearless look on all around, 'But this, I pray ye, bear to him, that Rudolph of Werdenberg, while he does him homage, has seen those who serve him, braggarts of knighthood, too, whom he would scorn to count his fellows!'"

The fifty knights started from their seats, with oaths of rage, and laid each his hand upon his sword; while every scowling face was turned upon Rudolph, who met the fiery glances with unblenching cheek. But Grindel interposed—

"Nay, nay, good friends, give over! This blustering gentleman deserves your pity rather. A truce! a truce! Fair words and deeds, for I have a friendly boon to ask. Rudolph, we have heard that thou didst but yesterday espouse the beauteous Linda of Hatzingen. Shall we not hail the bride of Werdenberg?"

"The bride! The bride!" shouted all in rejoinder. Rudolph, with boiling blood, replied to Grindel—

"Thou art a knight of fame and honour. Blast not that fame and honour now, by insult to a woman!"

"The bride! The bride!" reiterated the company, now exhilarated with repeated draughts. Grindel, enraged, more slowly answered—

"It might become thee, proud talker, to pass more kindly words. I'll give thee a lesson in humility that may, perchance, drag down that lordly look of thine! Know then, that Grindel of Mayenfeld claims rule in Werdenberg, by commission of Frederic of Austria, to whom I rejoice, for thy sake, that thou bearest such affection. Pray thee, noble sir, shall we greet the fair Linda now?"

Rudolph felt to his heart's core the precipice on which he was standing.

* The peacock's feather was the plume of Austria.

"I pray thee pardon me, Sir Grindel, for I knew not that it had pleased the Duke to relieve me of the burden of my possessions and bestow them upon thee. I do repent me of my refusal; and go to see the lady Linda fitly arrayed for the greeting of the new lord of Werdenberg!"

He bowed and strode away; while a shout of triumph over his fancied discomfiture, echoed through the hall. The seneschal, who had listened with trembling anxiety to the war of words, followed him unseen, and encountered him in a near corridor.

"Well met! good Wechsal—horses—horses! beyond the private gate—and see them out speedy!—away!"

They parted, and Rudolph hurried to Linda's apartment. The servants had seen, for they could not help it, that all was not right in the castle—that the comers bore not the demeanor of guests, but rather of rulers; and the mysterious aspect of affairs had been whispered from mouth to mouth, from male to female, until it had reached the ear of Linda. Alarmed for Rudolph's safety, she had arisen and attired herself; and when he entered the apartment, he exclaimed—

"This is well, dear Linda; I thought to have been delayed by the toilet, love. Pray thee, hasten. Array thee for thy horse, for we must ride hard to-night. Question not, but speed!"

Loving and trustful, she needed no second appeal; in a few moments she rejoined him. His well tried blade was upon his thigh, and his frame had been encased already, ere the knights had come in, in a steel shirt of mail, whose jointed links played easily with his motion, and allowed the free play of his sinewy limbs. Half bearing Linda with one arm, while, with the other, he supported his sword, that it might not clash against his armour, he passed through passages not yet explored by the self-constituted possessors of Werdenberg, from the castle and to the designated spot beyond the wall. The horses were ready there—his own coal black charger, who suffered none other than himself to bestride his noble back—and a gentler, yet a sturdy beast, which Linda might safely ride. A moment, and, accompanied by the seneschal and one attendant else, Rudolph led the way with his bride, an exile from his lordly home, little thinking in that anxious moment, of his triumphant address to that now tremulous and flying creature, one night ago, as amid gladsome welcomings, kinder auspices, alas! he ushered her to that lordly home! The steps that surrounded the castle in its immediate vicinity were safely descended, the boisterous sounds of the yet continued revelry, had grown dimmer to the ears of the fugitives, and jutting crags shut them out from sight of the castle, when, in a saddened tone, Rudolph said to the seneschal:—

"So, Wechsal, didst not dare to share thy secret with another—and are all I trusted, save thou and Arnolph here, so careless of me, that they track me not, and I must speed through the Rhienthal to Arbon, with foemen, it may be, all around, and none beside ye twain for company?"

He had scarcely spoken, when, as they turned abruptly, where the path winded, they came upon a troop of fifty horsemen, all drawn up by the roadside, still as they had been hewn from the stones of the crags around. One look at each as he rode by them, and even in the faint ray of the early dawning, he knew them for his own—of all, the bravest—them whom he would have chosen for the fiercest charge, and felt that none were worthier of trust—them, not one of whom but would have died for him!"

"All's well—all's well!" he said, in low words to Wechsal, while his eyes moistened with generous feeling; "thou has done well in this!"

Wheel! Forward! Would Grindel and the fifty knights were here in sword-reach now!"

The horsemen parted, inclosing their chief in the midst; the troop struck into a brisk gallop, so soon as the valley was reached, and fast receded from the desecrated towers of Werdenberg.

[TO BE CONTINUED.]

ANECDOTES CONNECTED WITH THE APPOINTMENT OF

GEN. WASHINGTON TO THE COMMAND OF THE ARMY, JUNE 16, 1775.

In a manuscript Journal, under date of Nov. 4, 1825, I find a record of a conversation had with the venerable John Adams at that time, relative to the appointment of Gen. Washington. It was in substance as follows:

The army was assembled at Cambridge, (Mass.,) under Gen. Ward, and Congress was sitting at Philadelphia.* Every day arrived new applications in behalf of the army. The country was urgent that Congress should *adopt the army*; for until they had, it must be considered and was in law considered only as a mob, a band of armed rebels. The country was placed in circumstances of peculiar delicacy and danger. The struggle had begun, and yet every thing was at loose ends. The great trial now seemed to be in this question—*who should be commander in chief?* It was exceedingly important, and was left to be the hinge on which the whole might turn for or against us. The Southern and Middle States, warm and rapid in their zeal, for the most part were jealous of New-England, because they felt that the real physical force was here. What then, was to be done! All New-England adored Gen. Ward; he had been in the French war, and had come out laden with laurels. He was a scholar and a gentleman. All the qualifications seemed to cluster in him; and it was confidently believed the army could not receive any commander over him. What, then, was to be done? Difficulties at every step. The struggle was to be long and bloody. Without union all was lost. Union was strength. The country and the whole country must come in. One pulsation must break through all hearts. The cause was one, and the arm must be one. The members had talked, debated, considered, and guessed, and yet the decisive step had not been taken. At length Mr. Adams came to his conclusion, and the manner of developing it was nearly as follows: He was walking one morning before Congress Hall, apparently in deep thought, when his cousin, Samuel Adams, came up to him and said, "What is the topic with you this morning, cousin?" "Oh, the army, the army," he replied. "I am determined what to do about the army at Cambridge," he continued—"I am determined to go into the Hall this morning, and enter on a full detail of the state of the Colonies, in order to shew the absolute need of taking some decisive steps. My whole aim will be to induce Congress to appoint a day for adopting the army as the legal army of these United Colonies of North America; and then to hint at my election of a commander-in-chief."—"Well," said Samuel Adams, "I like that, cousin John; but on whom have you fixed as this commander?" "I'll tell you, George Washington, of Virginia, a member of this house." "Oh," replied Samuel Adams quickly, "that will

never do, never, never." "It *must* do, it *shall* do," said John, "and for these reasons, the Southern and Middle States are loth to enter heartily into the cause, and their arguments are potent; they see that New-England holds the physical power in her hands, and they fear the result. A New-England army, a New-England commander, with New-England perseverance, all united, appal them. For this cause they hang back. Now, the only way is, to allay their fears, and give them nothing to complain of; and this can be done in no other way but by appointing a Southern chief over this force. Then all will feel secure, then all will rush to the standard. This policy will blend us in one mass, and that mass will be resistless."—At this, S. Adams seemed greatly moved.—They talked over the preliminary circumstances, and John Adams asked his cousin to second his motion. Mr. Adams went in, took the floor, and put forth all his strength in the delineations he had prepared, all aiming at the adoption of the army. He was ready to own the army, appoint a commander, vote supplies and proceed to business. After his speech some doubted, some objected, and some feared. His warmth mounted with the occasion, and to all these doubts and hesitations he replied, "Gentlemen, if this Congress will not adopt this army before ten moons have set, New-England will have a Congress of her own which will adopt it, and she, she will undertake the struggle alone, yes, with a strong arm and a clear conscience will front the foe alone." This had the desired effect. They saw New-England was not playing, and was not to be played with; they agreed to appoint a day.

The day was fixed. It came. Mr. Adams went in, took the floor, urged the measure, and after debate it passed. The next thing was to get a lawful commander for this lawful army, with supplies, &c. All looked to Mr. Adams on this occasion; and he was ready. He took the floor, and went into a minute delineation of the character of Gen. Ward, bestowing on him the epithets which, then, belonged to no one else. At the end of this eulogy he said, "but this is not the man I have chosen." He then went into a delineation of the character of a commander-in-chief, such as was required by the peculiar situation of the colonies at that juncture; and after he had presented the qualifications in his strongest language, and given the reasons for the nomination he was about to make, he said—"Gentlemen, I know these qualifications are high, but we all know they are needful at this crisis, in this chief. Does any one say they are not to be obtained in the country? I reply, they are, they reside in one of our own body, and he is the person whom I now nominate, George Washington of Virginia."

Washington, who sat on Mr. Adams' right hand, was looking him intently in the face to watch the name he was about to announce; and not expecting it would be his own, he sprung from his seat the moment he heard it, and rushed into an adjoining room as quickly as though moved by a shock of electricity.

Mr. Adams had asked his cousin Sam to move for an adjournment as soon as the nomination was made, in order to give the members time to deliberate in private. They did deliberate, and the result is before the world.

I asked Mr. Adams, among other questions, the following: "Did you never doubt of the success of the conflict?" "No, no," said he, "not for a moment. I expected to be hung and quartered, if I was caught; but no matter for that, my country would be free; I knew George III. could not forge chains long enough and strong enough to reach round the States."

[*Boston Daily Advertiser.*

AGRICULTURAL ITEMS.

Kicking Cows.—It is not unfrequently the case, says the Editor of the Albany Cultivator, that cows which are excellent for milk, acquire some habits that materially lessens their value, and of these injurious habits, that of kicking, is perhaps, the most common. Bowing on one fore leg, tying both hind-legs together, holding by the horns, and various other means have been resorted to in order to break up the practice, but frequently without avail. Mr. Kidder has communicated to the Hancock Agricultural Society, a mode which he pronounces an effectual cure, and which he thus describes:

"Noticing the position of a cow while kicking, which was to drop the head and curve up the back, I thought I would try a new and simple method to cure her. After tying her to the stanchels as usual, I make one end of a rope fast round her horns, and put the other end over the girt, which was about two feet higher than the top of the stanchels, and about the same distance in front; drew it pretty tight and fastened it to a stud. This so effectually secured her, that she was milked with perfect ease and safety; and after practicing this method of tying a few times, she gave me no more trouble. Several subsequent trials have proved this method not only superior to all others as an effectual remedy, but it is so easy and simple that a female or a boy can secure a cow without difficulty."

Cows holding up their Milk.—Mr. Editor: I am not in the habit of writing for any publication, but as I have just commenced farming with my father, who is one of the best managers of the old school, I feel very much interested in whatever I see or hear relative to the management of a farm. I thought I might be of use to some one by giving my father's mode of treating a cow that holds up her milk on taking away the calf, or at any other time. In the first place, he ascertains what kind of food the cow likes best; whether it be meal, oats or potatoes:—he takes the food and coaxes her to one corner of the yard or into the stable; gives it, and begins to milk; if the cow refuses to give her milk, he tries the same the second time, and has always succeeded to get the milk as freely as from any other cow, unless the food was neglected, or contained something which she did not like. My father bought a young cow last winter: she had her calf quite early in the spring; on taking away the calf she held her milk, giving it down only once in two or three days; he tried several experiments, (not flogging the trouble of feeding,) till the cow was nearly dry: finding none of them effectual, he began to feed, and never has been troubled since. The cow says, no supper no milk. This is the fourth or fifth cow of this description he has had, and has always succeeded in getting the milk as freely as from any other cow.

N. E. Farmer.

The Horse.—A horse's exercise should be proportioned to his strength, manner of feeding, and the labor required of him. He ought, however, to have at least two hours of daily exercise, but should not be ridden fast after having been newly fed and watered. A fat horse requires a long course of moderate exercise before he can safely be put to so violent an one as trotting. In hot weather, washing their legs is proper, but it should be succeeded by a good rubbing. In winter cold water is injurious and apt to produce swelling. It should be a general rule to ride a horse slowly at the beginning of the day's journey. New corn should be avoided in feeding, particularly upon a long trip. It is a very bad practice to allow horses to stand upon wet dirty litter in the day time. All litter should be removed early in the morning. Currying, brushing, and rubbing down horses is of great importance, not only to their coats, but also to their health.

Tenn. Farmer.

A Fact.—Accidents sometimes lead to important results. A cypress-vine was planted on sandy loam, fertile for common crops, but grew only an inch or two, and continued stationary for several weeks. A quantity of soap-suds was then thrown upon it, and it immediately commenced a vigorous growth, and advanced further in twenty-four hours than it had done in weeks before.

New Genn. Farmer.

Lime as a Manure for Potatoes.—John Ide, of Waterford, Vt., states that he raised one hundred bushels more of potatoes to the acre than otherwise, by making use of a pint of lime to each hill in planting. The lime is laid in the hill, and the potatoe dropped and pressed upon it before covering.

The best mode of sowing Lucerne, that inestimable valuable plant of the farmer, is like that of clover seed, amongst barley either after a bare fallow or a green crop, such as turnips eaten off by the sheep or turnips drawn. The quantity of seed should be fourteen pounds the acre on a sandy loam or gravelly soil. When the plant has taken sufficient root, in order to destroy the annuals growing amongst it, take a common harrow, well sharpened, and harrow the land completely. There is no fear of eradicating the Lucerne, since it will in twelve months be sufficiently rooted to stand the effects of the harrow. If the land be top-dressed, the harrowing will effect a double purpose, it will both eradicate the weeds and sink the manure. If the plants take root, the proprietor will be amply repaid by an annual top-dressing of either compost or animal manure.

An Anti-Slavery Sugar Company has been formed in London for the cultivation of sugar, rum, &c. by free labor in British India.

MISCELLANEOUS ITEMS.

Religious Reverence.—A Highlander, observed the Rev. Dr. Macleod, can give and take a joke like his neighbors on most subjects, but not on his religion; here he is reserved and shy.—To know them on this subject, you must be a Highlander. A friend of mine was in a boat with a man from St. Kilda, advancing, for the first time, from his native rock to visit the world. As he went towards the Isle of Mull, they asked him about St. Kilda, and told him of the magnificent things at Mull. He parried them off with great coolness, for some time, and good humor. At length one asked him if ever he heard of God at Kilda. Immediately he became grave and collected. "To what land do you belong? (said he,) describe it to me." "I (said the other,) come from a place very different from your barren rocks; I come from the land of flood and field, and land of wheat and barley, where nature spreads her bounty in abundance and luxuriance before us." "Is that (said the Kilda man,) the kind of land you come from? Ah! then you may forget God, but at St. Kilda man never can. Elevated on his rocks, suspended over a precipice, tossed on the wild ocean, he never can forget his God; he hangs continually on his arm." All were silent in the boat, and not a word more was asked him regarding his God.

A Beautiful Sentiment.—The late eminent judge, Sir Allen Park, once said at a public meeting in London:

"We live in the midst of blessings, till we are utterly insensible of their greatness, and of the sources from whence they flow. We speak of our civilization, our arts, our freedom, our laws, and forget entirely how large a share of all is due to Christianity. Blot Christianity out of the pages of man's history, and what would his laws have been—what his civilization? Christianity is mixed up with our very being and our daily life: there is not a familiar object around us, which does not wear a different aspect, because the light of Christian hope is on it—not a law which does not owe its truth and gentleness to Christianity—not a custom which cannot be traced, in all its holy and healthful parts, to the Gospel."

Method of Restoring Life to the Apparently Drowned.—recommended by the "Royal Humane Society of England," instituted in the year 1774. Avoid all rough usage. Do not hold up the body by the feet, nor roll it on casks or barrels. Lose not a moment in carrying the body to the nearest house, with the head and shoulders raised. Place it in a warm room if the weather is cold. Preserve silence, and positively admit no more than three intelligent persons. Let the body be instantly stripped, dried and wrapped in hot blankets, which are to be renewed. Keep the mouth, nostrils and throat free and clean. Apply warm substances to the back, spine, pit of the stomach,

arm-pit, and the soles of the feet. Rub the body with heated flannel, or cotton, or warm hands. Attempt to restore breathing by gently blowing with a bellows into one nostril, closing the mouth and other nostril. Press down the breast carefully, with both hands, then let it rise again, and thus imitate natural breathing. Keep up the application of heat—continue the rubbing, increase it when life appears, and then give a teaspoonful of warm water, or very weak brandy and water, or wine and water. Persevere for six hours. Send quickly for medical assistance.

Improved Chimneys—Economy of Fuel.—By a very simple and cheap improvement in chimneys, the largest dwelling houses may be made comfortably warm in the most inclement weather by a single fire of Schuylkill coal, and one-half of the trouble of keeping rooms and furniture in order avoided. An ingenious friend of ours two years ago caused to be erected a fine three story house; in the front part of the basement he had placed a grate of the ordinary size and style for rooms of similar dimensions, through which three cast iron tubes of two inches diameter passed from an under cellar, one to the second, and the other to the third story, each ending in a handsome mouth projecting a little way from the chimney into the room for which heat was required.

The currents of heated air thus produced were found to answer all the purposes of separate fires, and the trouble of dusting furniture two or three times a day, and the cost of purchasing it anew before it had seen half its appropriate service, were no longer to be incurred. When it is desirable to moderate the heat in any of the upper rooms, a cap is placed on the lower end of the tube, and the ingress of air prevented. Every house-keeper whose furniture has been spoiled, and every person whose health has been impaired by coal fires, will appreciate the advantages of this kind of chimneys, which if known, would be generally introduced.

New-Yorker.

To Produce Light by Friction.—This may be done by rubbing two pieces of fine loaf sugar together in the dark; but in a much greater degree by two pieces of siler or quartz. By this means one may distinguish the time of night by a watch; but what is more surprising, the effect is produced equally strong, by rubbing the pieces of quartz together under water.

Anecdote of Burns.—To a person who was frugal of his wine at the table, and who was standing holding a fresh bottle, saying, "do allow me to draw this one cork more; I ask it as a favour?" "Sir," said Burns, "you hold the screw over the cork like Abraham, holding the knife over Isaac—make the sacrifice."

A Mode of Preparing Paper which shall Resist Moisture.—This process consists in plunging unsized paper once or twice into a clear solution of mastic in oil of turpentine and drying it afterwards by a gentle heat.—The paper thus prepared, without becoming transparent, has all the properties of writing paper, and may be used for that purpose. It is particularly recommended for passports, for the books of porters and other laborers, and indeed is desirable for a great variety of purposes for which paper that is capable of absorbing damp is very inconvenient. When laid by it is perfectly secure from being injured by mouldiness or mildew, and is not likely to be destroyed by mice or insects.

Spot on the Sun.—A late number of Galigani's Messenger gives an account of Decuppi, an Italian astronomer, who has succeeded in manufacturing glasses which enable the observer to look at the sun without having his observations at all affected by its rays. By means of these glasses the sun appears of a pure whiteness, and the surrounding firmament is equally distinct. M. Decuppi is stated to have observed on the 3d December, an unusual number of spots on the sun's disc, and having made an addition to his apparatus, he perceived at a quarter before nine on that day, a small black spot, entirely free from penumbra, and of perfectly spherical form, which had advanced upon the disc, describing an arc of about seven minutes. Repeated observations convinced him that it had in the meantime, advanced toward the sun's limb, to the extent of two minutes and thirty seconds. At three minutes after nine, when M. Decuppi attempted to make a new observation, the spot had disappeared. The perfectly round figure of the spot, its blackness, the smallness of its diameter, its motion, and the absence of penumbra, appeared to the observer to be so many proofs that it was a small planet, hitherto undiscovered, which was passing over the sun's disc.

Balloonng.—Mr. Wise, the balloonist, has made some curious discoveries. He says, what we all know, that almost every one on looking down from a great height, feels affected by vertigo—giddiness of the head—and a sensation of sickening insecurity; but maintains that this only occurs when the individual is sitting or standing upon something connected with the ground. He avers that while suspended in air, entirely isolated from the earth, no such feeling or sensation can be experienced; but that the slightest link of communication—even a single rope thrown out and touching the ground—is certain to create it. This is worth investigation, and we trust those who have leisure and disposition will test it, as its demonstration will be the solution of another of Nature's mysteries.

Mr. Marsh, a chemist, connected with the Royal Arsenal, England, has discovered that iron, which has remained a considerable time under water, when reduced to small grains, or an impalpable powder, will become

red hot and ignite any object with which it may be brought in contact.

Eighty Years Ago.—The Philadelphia gentlemen wore three cornered hats with crowns no higher than the tops of their heads. The dandies of the period had coats with cuffs up to their elbows, lined in the lower part of the sleeve with sheet lead to keep them down. Their stocks were furnished with large silver buckles behind, and they wore buckles of the same metal, and very broad, on the tops of their shoes. Their inexpressibles came down to the knees, and gave occasion for another pair of stupendous buckles. Even the boys wore wigs. The ladies always wore caps, and no woman married or single, was seen with a bare head; they had stays instead of corsets, and hoops, from two to four feet in diameter. Their shoes were very high in the heels, so as to add considerable to the lady's apparent altitude.

Illegal Breeches.—Strutt quotes an instance of a man whom the judges accused of wearing breeches contrary to law (for a law was made against them:) he, for his excuse, drew out of his slops the contents; at first a pair of sheets, two table cloths, ten napkins, four shirts, a brush, a glass, and a comb, with nightcap, and other things of use, saying, "Your worship may understand that because I have no safer storehouse, these pockets do serve me for a room to lay up my goods in; and though it be a straight prison, yet it is big enough for them, for I have many things of value yet within it." His excuse was heartily laughed at and accepted.

Countess Wilton's Art of Needlework.

It is said that a tea-spoonfull of oil of vitriol mixed in a cup of water, will without fail remove any berry stains from garments without injury to the cloth.

A fat lady in West Dedham the other day undertook to commit suicide by drowning herself. Just as she was about to take the fatal plunge, a huge bull-frog came to the surface of the water directly beneath her, and fairly frightened her from her purpose. Who says croakers are not sometimes useful?

Gunpowder to clear the Channels.—Mr. Taylor, the sub-marine explorer, descended under the ice into the Conrad river at Lowell, about a week since, and, with about twenty pounds of powder, blew a body of ice, of a surface of three or four rods, and two feet thick, from three to five hundred feet in the air, while the surface broken and cracked was three times greater in extent.

The estimated expense of keeping a pack of fox-hounds, in England, and hunting four days a week, and occasionally a bye-day, is \$20,000 a year.

Feeling Flat.—A man feels flat when he tells a tale for the purpose of raising a laugh, and is then obliged to explain fifty circumstances to make the company understand the joke.